CD RECEIVER

KDC-5090R/RY

SERVICE MANUAL

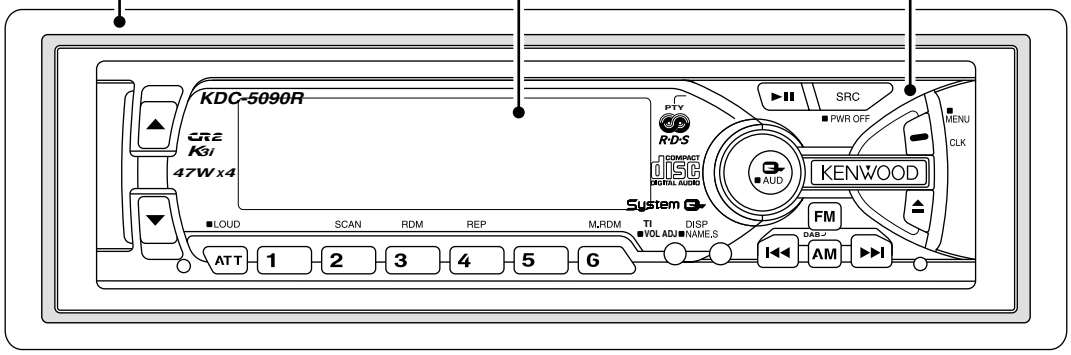
KENWOOD

B51-7752-00 (N) 1939

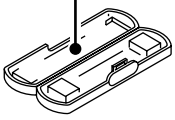
ESCUTCHEON ASSY
(B07-3007-03)

FRONT GLASS
(B10-3273-01)

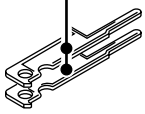
PANEL ASSY
(A64-2171-02)



PLASTIC CABINET ASSY
(A02-1497-03)

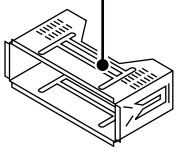


LEVERx2
(D10-4562-04)

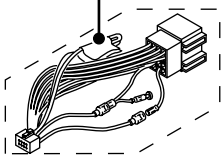


SCREW SET
(N99-1704-05)

MOUNTING HARDWARE ASSY
(J21-9641-13)



DC CORD
(E30-4944-05): KDC-5090RY
(E30-4958-05): KDC-5090R



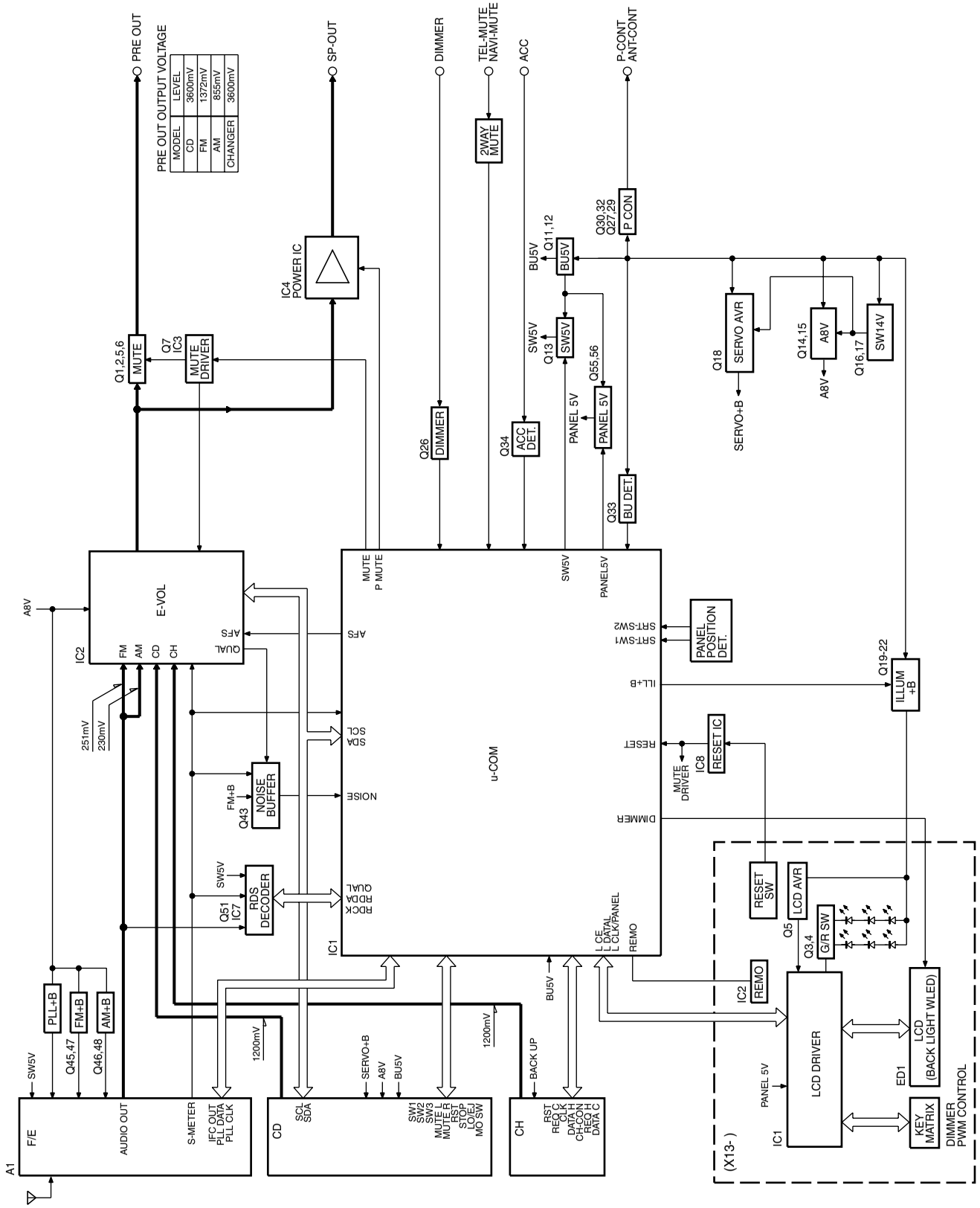
ANTENNA ADAPTOR
(T90-0523/0534-05)

The MECHANISM OPERATION DESCRIPTION is the same as model KDC-S3007 and KDC-5050RG.
Please refer to the service manual for model KDC-S3007(B51-7029-00) or KDC-5050RG(B51-7099-00).

40%

KDC-5090R/RY

BLOCK DIAGRAM



COMPONENTS DESCRIPTION

●SWITCH UNIT (X13-99XX-XX)

Ref.No.	Component Name	Application/Function	Operation/Condition/Compatibility
IC1	LC75808W	LCD driver with the key matrix	
IC2	RS-171	Remote sensor IC	
Q1	DTA114EUA or KRA302	Key-permission SW	For the key scanning start
Q3	2SD2114K	Red LED SW	When a base goes "Hi", RED LEDs are turned on.
Q4	2SD2114K	Green LED SW	When a base goes "Hi", GREEN LEDs are turned on.
Q5	2SC2412K or 2SD601A	VLCD AVR	
Q6	DTA114EUA or KRA302	REMO SW	While a base goes "Lo", PAN 5V is supplied to the Remote sensor IC.
Q7	DTC143ZK	Dimmer SW	Usually Q7's base goes "Hi". When DIMMER mode is selected, pulse wave shape is applied to Q7's base.

●ELECTRIC UNIT (X25-87XX-XX)

Ref.No.	Component Name	Application/Function	Operation/Condition/Compatibility
IC1	UPD703033GC057	System MI-COM.	
IC2	TDA7407D	E.VOL & N.C.MPX IC	
IC3	HD74HC02FP or TC74HC02AF	Mute logic	2-input NOR x 4
IC4	TA8263BH	Power AMP. IC	
IC7	TDA7479D	RDS decoder	
IC8	S-80837ANNP	Reset IC	When BU 5V voltage is less than 3.7V, IC outputs "Lo".
Q1	DTC143TUA or KRC410	Pre mute (Front L)	When Q1's base goes "Hi", Pre-output is muted.
Q2	DTC143TUA or KRC410	Pre mute (Front R)	When Q2's base goes "Hi", Pre-output is muted.
Q5	DTC143TUA or KRC410	Pre mute (Rear L)	When Q5's base goes "Hi", Pre-output is muted.
Q6	DTC143TUA or KRC410	Pre mute (Rear R)	When Q6's base goes "Hi", Pre-output is muted.
Q7	DTA124EUA or KRA303	Mute driver	When BU detection SW or System RESET or MI-COM.'s Pre-mute is working, a base goes "Lo", and Q7 is turned on.
Q11	2SC4081 or 2SD1819A	BU 5V AVR	While BACKUP is applied, AVR outputs +5V. Q11 and Q12 are inverted Darlington connection.
Q12	2SB1548(P)		
Q13	2SA1576A or 2SB1218A	SW 5V	While a base goes "Lo", SW 5V is supplied to the microprocessor peripheral circuits.
Q14	2SC4081 or 2SD1819A	A8V AVR	When Q14's base goes "Hi", A8V AVR outputs 8V.
Q15	2SB1548(P)		
Q16	DTC124EUA or UN5212	SW14V SW	A8V AVR and SERVO +B AVR ON/OFF control While Q16's base goes "Hi", Q17 is turned on, A8V AVR and SERVO +B AVR are working.
Q17	DTA124EUA or KRA303		
Q18	2SD2375	SERVO +B AVR	When Q18's base goes "Hi", SERVO +B AVR outputs 8V.
Q19	DTC124EUA or UN5212	ILL +B SW	ILL +B AVR ON/OFF control While Q19's base goes "Hi", Q20 is turned on, and ILL +B AVR is working.
Q20	DTA124EUA or KRA303		
Q21	2SB1184	ILL +B AVR	While Q22's base goes "Hi", AVR outputs +10.5V. Works during POWER ON mode with a panel attached to the set.
Q22	2SC4081 or 2SD1819A		
Q26	DTC144EUA or UN5213	Small lamp detection SW	When vehicle small lamps turn on, Q26 is turned on .
Q27	DTC114YUA or UN5214	P-CON SW	When Q27's base goes "Hi", Q32 is turned on . Works during POWER ON mode.
Q32	2SB1277(Q,R)		

COMPONENTS DESCRIPTION

Ref.No.	Component Name	Application/Function	Operation/Condition/Compatibility
Q29	DTA124EUA or KRA303	P-CON. protection inhibit SW	Prevents Q30 tuning ON during start-up after power ON.
Q30	2SA1576A or 2SB1218A	P-CON. protection SW	Protect Q32 by turning ON when P-CON output is grounded.
Q33	2SC4081 or 2SD1819A	BU detection SW	While BACKUP is applied, a base goes "Hi", and Q33 is turned on. When momentary power down has detected, a base goes "Lo", and Q33 is turned off.
Q34	2SC4081 or 2SD1819A	ACC detection SW	While ACC is applied, a base goes "Hi", and Q34 is turned on.
Q42	DTC124EUA or UN5212	E. VOL mute SW	When BU detection SW or MI-COM.'s mute is working, a base goes "Hi", and Q42 is turned on.
Q43	2SC4081 or 2SD1819A	Noise buffer	
Q45	DTC124EUA or UN5212	FM +B SW	When Q45's base goes "Hi", Q47 is turned on . Works during FM reception mode.
Q47	2SB1277(Q,R)		
Q46	DTC124EUA or UN5212	AM +B SW	When Q46's base goes "Hi", Q48 is turned on . Works during AM reception mode.
Q48	2SB1277(Q,R)		
Q51	DTC144EUA or UN5213	IFC buffer	Waveform shaping
Q52	2SC4081 or 2SD1819A	Composite signal output buffer	
Q55	2SA1576A or 2SB1218A	PAN 5V SW	While a panel is attached to the set, Q56's base goes "Hi", and Q55 is turned on.
Q56	DTC124EUA or UN5212		

●CD PLAYER UNIT (X32-5010-00)

Ref.No.	Component Name	Application/Function	Operation/Condition/Compatibility
IC1	AN22000AA	RF amplifier	Generation of RF signal based on the signals from the APC circuit and pickup, and generation of servo error (focusing error and tracking error) signals. Detection of dropout, anti-shock, track crossing and off-track conditions, Gain control function building in.
IC2	MN662774KG1	CD signal processor bult-in MI-COM.	
IC4	BA5917AFP	4CH BTL driver	Focusing coil, tracking coil, spindle motor and sled motor driver
IC6	NJM4565MD	OP Amp.	Low pass filter
Q1	MCH6101	APC	LD power control
Q2	DTC124EUA	P ON SW	When CD source is selected, Q2's base goes "Hi", Q3 and Q4 are turned on.
Q3	DTA143XUA	A.8V SW	A8V ON/OFF control. When a base goes "Lo", Q3 is turnde on.
Q4	2SA1362	D.5V SW	D5V ON/OFF control. When a base goes "Lo", Q4 is turnde on.
Q5	DTC124EUA	MOTOR SW	When CD loading or eject operation is activating, Q5's base goes "Hi", Q4 is turned on.

MICROCOMPUTER'S TERMINAL DESCRIPTION

●IC1 (ELECTRIC UNIT : X25-87XX-XX)

Pin No.	Pin Name	I/O	Description	Processing Operation
1	AM+B	O	AM+B control	"Hi": During AM reception
2	FM+B	O	FM+B control	"Hi": During FM reception, "Hi": Last FM mode (only RDS model)
3	$\overline{\text{AFS}}$	O	Noise detection time constant switching terminal	"Hi": During FM reception, "Lo": During FM seek or AF search
4	PLL-DATA	I/O	Data input/output with F/E	
5	PLL-CLK	I/O	Clock input/output with F/E	
6	EVDD	-	Power supply connection terminal	Connected to BU 5V lines.
7	EVSS	-	Ground connection terminal	Connected to GND lines.
8	NC	O		Not used(N.C.)
9	BEEP	O	BEEP sound output	
10	REMO	I	Data input from the remote control light sensor	
11	$\overline{\text{CH-REQH}}$	O	Request output to changers	"Lo": Request
12	CH-RST	O	Reset output to changers	⎍ : Reset
13	$\overline{\text{IC2-SDA}}$	I/O	Data line with IC2, IC5 and CD MECHA. MI-COM.	
14	$\overline{\text{IC2-CLK}}$	I/O	Clock line with IC2, IC5 and CD MECHA. MI-COM.	
15	CH-MUTE	I	Mute request from changers	"Hi": Mute request
16	CH-CON	O	Changer control	"Hi": Operation mode, "Lo": Standby mode
17	DIMMER-CON	O	Dimmer control output	Pulse wave shape: DIMMER mode, "Hi": POWER ON
18	TEST	-	Test terminal	Not used (connected to GND lines)
19	$\overline{\text{P-MUTE}}$	O	Power IC mute control output	"Lo": Mute (POWER OFF, TEL MUTE)
20	P-STBY	O	Power IC standby control output	"Hi": POWER ON mode except panel detached or panel mask position
21	MUTE	O	IC2 mute control output	"Hi": Mute on
22	NC	O		Not used(N.C.)
23	PRE-MUTE	O	Pre-outputs mute control output	"Lo": Mute
24	$\overline{\text{ACC-DET}}$	I	ACC detection input	"Hi": ACC OFF, "Lo": ACC ON
25	$\overline{\text{DIMMER}}$	I	Small lights detection input	"Lo": During vehicle small lamps turn on.
26	$\overline{\text{SW5V}}$	O	SW 5V control output	"Lo": POWER ON mode or during CD loading / eject action.
27	$\overline{\text{EXT-AMP-CON}}$	O	External amp. control output	Bass boost OFF__"Hi": 160msec, "Lo": 40msec Bass boost LOW__"Hi": 130msec, "Lo": 70msec Bass boost HI__ "Hi": 100msec, "Lo": 100msec
28	P-CON	O	Power control output	"Hi": POWER ON mode except ALL OFF mode.
29	ANT-CON	O	Antenna control output	"Hi": During FM/AM reception or TI reception.
30	P-ON	O	SW 14V control output	"Hi": POWER ON mode or during CD loading / eject action
31	$\overline{\text{RESET}}$	I	Reset input terminal	"Lo": System reset
32	XT1	I	Sub clock resonator connection terminal	Clock count during POWER OFF mode
33	XT2	-	Sub clock resonator connection terminal	
34	REGC	-	C terminal	
35	X2	-	Main clock resonator connection terminal	Oscillation stop: POWER OFF mode or momentary power down detected
36	X1	I	Main clock resonator connection terminal	
37	VSS	-	Ground connection terminal	Connected to GND lines.
38	VDD	-	Power supply connection terminal	Connected to BU 5V lines.

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Description	Processing Operation
39	CLKOUT	O	Internal system clock output	Not used (N.C.)
40	NC	O		Not used (N.C.)
41	NC	O		Not used (N.C.)
42	TYPE0	I	Destination type input terminal 0	
43	TYPE1	I	Destination type input terminal 1	
44	TYPE2	I	Destination type input terminal 2	
45	TYPE3	I	Destination type input terminal 3	
46	IC2TYPE0	I	IC2 setting terminal	"Lo": Initial value
47	IC2TYPE1	I	IC2 setting terminal	"Lo": Initial value
48	NC	O		Not used(N.C.)
49	NC	O		Not used(N.C.)
50	NC	O		Not used(N.C.)
51	NC	O		Not used(N.C.)
52	ILL-ON	O	Illumination AVR on/off control output	"Hi": POWER ON mode except panel detached or panel mask position
53	$\overline{\text{M-MUTE L}}$	I	Mute request (Lch) from CD MECHA. MI-COM.	"Lo": Mute request
54	$\overline{\text{M-MUTE R}}$	I	Mute request (Rch) from CD MECHA. MI-COM.	"Lo": Mute request
55	BVDD	-	Power supply connection terminal	Connected to BU 5V lines.
56	BVSS	-	Ground connection terminal	Connected to GND lines.
57	$\overline{\text{M-RST}}$	O	Reset output to CD MECHA. MI-COM.	"Lo": Reset
58	$\overline{\text{M-STOP}}$	O	Stop request to CD MECHA. MI-COM.	"Lo": Stop mode, "Hi": Operation mode
59	NC	O		Not used(N.C.)
60	LO/EJ	I/O	CD MECHA. loading/Eject switching output	"Lo": Loading, "Hi": Eject, "Hi-Z": Stop or Break
61	MOSW	O	CD mechanism loading motor control output	"Hi": CD loading/ eject action or Break, "Lo": other
62	NC	O		Not used(N.C.)
63	CD-SW3	I	Down & limit switch detection input	"Hi": Chucking, "Lo": Pickup most inner position
64	NC	O		Not used(N.C.)
65	L-CE	I/O	CE output to LCD driver	
66	NC	O		Not used(N.C.)
67	NC	O		Not used(N.C.)
68	NC	O		Not used(N.C.)
69	NC	O		Not used(N.C.)
70	AVCONT	O	A/D converter reference voltage control output	"Hi": Active, Connected to AVREF terminal.
71	AVDD	-	A/D converter power supply connection terminal	Connected to BU 5V lines.
72	AVSS	-	A/D, D/A converter ground connection terminal	Connected to GND lines.
73	AVREF	I	A/D converter reference voltage input terminal	
74	PHONE	I	PHONE detection input	1V or less: TEL MUTE, 2.5V or greater: NAVI MUTE
75	NC(GND)	I		Not used(pull down to GND lines)
76	NC(GND)	I		Not used(pull down to GND lines)
77	SRT-SW2	I	SRT position detection input	Panel: (SW1, SW2)=(Hi, Hi) Slide: (SW1, SW2)=(Hi, Lo) Mask : (SW1, SW2)=(Lo, Lo)
78	SRT-SW1	I	SRT position detection input	
79	NOISE	I	FM noise detection input	
80	S-METER	I	S-meter input from F/E	
81	R-DATA	I	Data input from the RDS decoder IC	Except RDS model: Not used (pull down to GND lines)

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Description	Processing Operation
82	R-QUAL	I	Quality input from the RDS decoder IC	Except RDS model: Not used (pull down to GND lines)
83	IFC-OUT	I	F/E IFC OUT input terminal	"Hi": Station detected, "Lo": Not detected
84	NC(GND)	I		Not used (pull down to GND lines)
85	NC(GND)	I		Not used (pull down to GND lines)
86	NC	O		Not used (N.C.)
87	R-CLK	I	Clock input from the RDS decoder IC	Except RDS model: Not used (pull down to GND lines)
88	$\overline{\text{CH-REQC}}$	I	Request input from changers	"Lo": Request
89	KEY-REQ	I	Communication request input form LCD driver IC	
90	CD-SW1	I	Loading detection	"Lo": CD chucking.
91	CD-SW2	I	12cm disc detection terminal	When 12cm disc was detected, the input becomes "Lo" temporarily.
92	NC	O		Not used(N.C.)
93	$\overline{\text{BU-DET}}$	I	Momentary power down detection input	"Hi" : When momentary power down detected or BU OFF "Lo" : BU ON
94	CH-DATAC	I	Data input from changers	
95	CH-DATAH	O	Data output to changers	
96	CH-CLK	I/O	Clock input/output with changers	
97	L-DATAL	I	Data input from the LCD driver IC	
98	L-DATAS	I/O	Data output to the LCD driver IC	
99	L-CLK	I/O	Clock output to the LCD driver IC / Panel detaching detection input(LCD Driver)	"Lo": Panel attached
100	PAN5V	O	Panel 5V control	"Hi": Panel attached, "Lo": Panel detached

TEST MODE

TEST MODE

1. How to enter the test mode
   While holding the FM and Preset 6 keys, reset the unit.

2. How to exit from the test mode
   While holding the Preset 6 key, reset the unit.
   (Note) The test mode cannot be terminated by ACC OFF, power OFF or momentary power down.

3. Initial status in the test mode
   - Sources : ALL OFF
   - Display : All segments are lit.
   - Volume : -10 dB (displayed as "30")
   - Loudness : OFF
   - CRSC : OFF regardless of the presence of switching function.
   - SYSTEM Q : Flat
   - LED : White for no scanning. (VLCD model)

4. Special display in Tuner mode
   When any of the following messages is displayed in Tuner mode, the F/E may be abnormal.
   - "TNE2P NG" : The EEPROM is set to the default (unstable values) because the F/E was shipped without passing through the adjustment process, etc.
   - "TNCON NG" : Communication with the F/E is not possible.

5. Forced switching of K3I
   Each press of the Preset 6 key in Tuner mode should switch K3I from AUTO → Forced Wide → Forced Middle → Forced Narrow → AUTO.
   The initial status is AUTO and the display shows these modes as follows.
   - AUTO : FMA
   - Forced Wide : FMW
   - Forced Middle : FMM
   - Forced Narrow : FMN

6. Test mode specifications of the CD receiver
   - Forced ejection is inhibited in the reset start operation. When the unit is reset while a CD is loaded in it, the CD is not recognized by resetting.
   - Each press of the Track Up key jumps to the following track numbers:
     No. 9→ No. 15 → No. 10 → No. 11 → No. 12 → No. 13 → No. 14 → No. 9
     (The cycle restarts from here.)
   - Each press of the Track Down key jumps to the previous track number to the track being played.

7. Audio-related specifications
   - A short press of the Q key initiates the audio adjustment mode.
   - Pressing the ∗ key on the remote initiates the audio adjustment mode.
   - Continuous holding of a remote control key is inhibited.
   - Bass, Middle and Treble are adjusted in 3 steps of Min/Center/Max with the Track Up/Down keys.
   - Balance is adjusted in 3 steps of Left Max/Center/Right Max with the Track Up/Down keys.
   - Fader is adjusted in 3 steps of Rear Max/Center/Front Max with the Track Up/Down keys.
   - HPF is adjusted in 2 steps of Through/220 Hz with the Track Up/Down keys.
   - LPF is adjusted in 2 steps of Through/120 Hz with the Track Up/Down keys.
   - Bass f, Bass Q, Bass EXT, Middle f, Middle Q and Treble f are not dealt with by the audio adjustment.

8. Menu-related specifications
   - A short press of the CLK key initiates the Menu mode.
   - Pressing the DNPP/SBF key on the remote initiates the Menu mode.
   - Continuous holding of a remote control key is inhibited.
   - Calendar adjustment, calendar display switching and calendar memo are eliminated from the targets of continuous key holding. (FL model)
   - In the color adjustment mode, pressing the Preset 1 key sets Red, 2 sets Blue, 3 sets Green and 4 sets Green. (VLCD model)
   - Contrast is adjusted in 3 steps of 0/5/10 and the default is 5. (VLCD/LCD model)
   - Brightness is adjusted in 3 steps of 0/5/10 and the default is 10. (Normal FL model)

9. Backup current measurement
   When the unit is reset while ACC is OFF (i.e. by turning Backup ON), the MUTE terminal goes OFF in 2 seconds in place of 15 second. (The panel, CD mechanism and TAPE mechanism are not activated at this time.)

10. Special display when the display is all on
    Pressing the Preset keys while the power is ALL OFF displays the following information.

[PRESET 1]	Version display (8 digits, Month/Day/Hour/Minute) (Display) SYS xxxxxxxx System microcomputer PAN xxxxxxxx Panel microcomputer
[PRESET 2]	Serial No. display (8 digits) (Note) CD/RK type eXcelon model (Display) S. No. xxxxxxxx
[PRESET 3]	Short press : View power ON time. (The All OFF period is not counted.) Long press/hold : Clear power ON time. (Display) PonTim xxxxx Max. 65535 (hours)
[PRESET 4]	Short press : Display TAPE/CD/MD operation time. Long press/hold : Clear TAPE/CD/MD operation time (Display) CDTime xxxxx (CD/R) TapTim xxxxx (C/R) Max. 65535 (hours)
[PRESET 5]	Short press : Display TAPE/CD/MD ejection count. Long press/hold : Clear TAPE/CD/MD ejection count. (Display) EjeTim xxxxx Max. 65535 (times)
[PRESET 6]	Short press : Display Panel open/close count. Long press/hold : Clear Panel open/close count. (Display) PnCnt xxxxx Max. 655350 (times)

TEST MODE

11. Other specifications
    - Automatic panel closing when a tape/CD is inserted is inhibited. (M&T model)
    - Panel operation by turning power OFF/ON is inhibited. (M&T model)
    - Messages such as "CODE OFF" are not displayed when power is turned ON.
    - Pressing the ATT key opens or closes the panel. (M&T model)
    - Pressing the TI (AUTO) key during changer operation turns 2zone ON. 2zone can be turned OFF by pressing the TI (AUTO) key again. The P/S dot lights while 2zone is ON.
    - Pressing and holding the CLK key for a second in the ALL OFF status the Mask Key (security) write mode.

• Security-related information

1. Forced Power ON mode (All models)
   Even when the security (Mask key) is approved, resetting the unit while holding the ATT and Preset 4 keys makes it possible to turn the power ON for 30 minutes. After 30 minutes have elapsed, it is not possible to return to the previous condition unless the unit is reset again.

2. Method of registration of the security code after EEPROM (Tuner Unit Ass'y) replacement
   (Code security model)
   (1) Enter the test mode. (See " 1. How to enter the test mode")
   (2) Press the CLK key to enter the security registration mode.
   (3) Enter the code using the Preset 1/2/3/4 keys.
   Example: To enter "3510"
   - Press the Preset 1 key 4 times.
   - Press the Preset 2 key 6 times.
   - Press the Preset 3 key twice.
   - Press the Preset 4 key once.

   (4) Press and hold the DISP key for 3 seconds until "APPROVED" is displayed.
   (5) Exit from the test mode. (See " 2. How to exit from the test mode")
   (Note) All Clear is not applicable to the security code of this model.

3. Simplified method of clearing the security code (K Type only)
   (1) While the code entry is requested, press and hold the VOL UP key for 3 seconds while holding the DISP key pressed. (This should turn "----" off.)
   (2) Enter "KCAR" from the remote. (Same way as the 00 model)
   Press the 5 key on the remote twice, then press the Track Up key. (This enters "K".)
   Press the 2 key on the remote 3 times, then press the Track Up key. (This enters "C".)
   Press the 2 key on the remote once, then press the Track Up key. (This enters "A".)
   Press the 7 key on the remote twice, then press the Track Up key. (This enters "R".)
   (3) The security code is cleared and the unit enters the ALL OFF mode.
   (4) If you commit a mistake in the code entry, the unit enters the code request mode again.

4. Method of writing the Mask key while the EEPROM is in the initial status
   (1) Enter the test mode. (See " 1. How to enter the test mode")
   (2) Press the CLK key to enter the Mask key registration mode. "TRANSMIT1" should be displayed now. The display at this time should show " < > " in place of " [ ] ".
   (3) Point the Mask key remote toward the light sensor, and press and hold its key for more than 0.5 second.
   (4) When "TRANSMIT2" is displayed, press and hold the key on the Mask key remote for more than 0.5 second again. The first and second counter codes are not compared at this time.
   (5) When "APPROVED" is displayed, the write operation is complete. Now the demonstration mode is initiated and the test mode is terminated.
   (Note) In the same way as previous models, if 30 minutes have elapsed with no code written, an error occurs and the power is turned OFF.

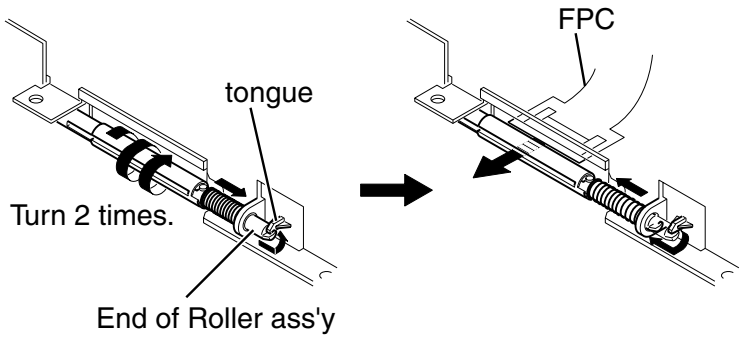
5. Method of initializing the Mask key
   (How to reset the unit from the Mask key approved condition to the factory condition)
   (1) Enter the test mode. (See " 1. How to enter the test mode")
   (2) "TRANSMIT1" is displayed and the Mask key entry request mode is initiated.
   The display at this time should show " ∗ ∗ " in place of " [ ] ".
   (3) Press and hold the key on the Master key remote for more than 3 seconds.
   (4) When "TRANSMIT2" is displayed, press and hold the key on the Master key remote for more than 3 seconds again.
   (5) When "APPROVED" is displayed, the Mask key is cleared, the demonstration mode is initiated, the test mode is terminated and the unit returns to the factory condition.

6. Method of clearing all Mask key-related data
   (1) Enter the test mode. (See " 1. How to enter the test mode")
   (2) Press the CLK key to enter the Mask key registration mode. "TRANSMIT1" should be displayed now.
   (3) Point the Master key remote toward the light sensor, and press and hold its key for more than 3 seconds (until the level display shows the full condition).
   (4) When "TRANSMIT2" is displayed, hold the key on the Mask key remote for more than 3 seconds again.
   If "TRANSMIT1" is displayed in place of "TRANSMIT2", restart the procedure from step (3).
   (5) When "APPROVED" is displayed, all security data is cleared and the unit returns to the condition before Mask key writing with the EEPROM in the initial status.

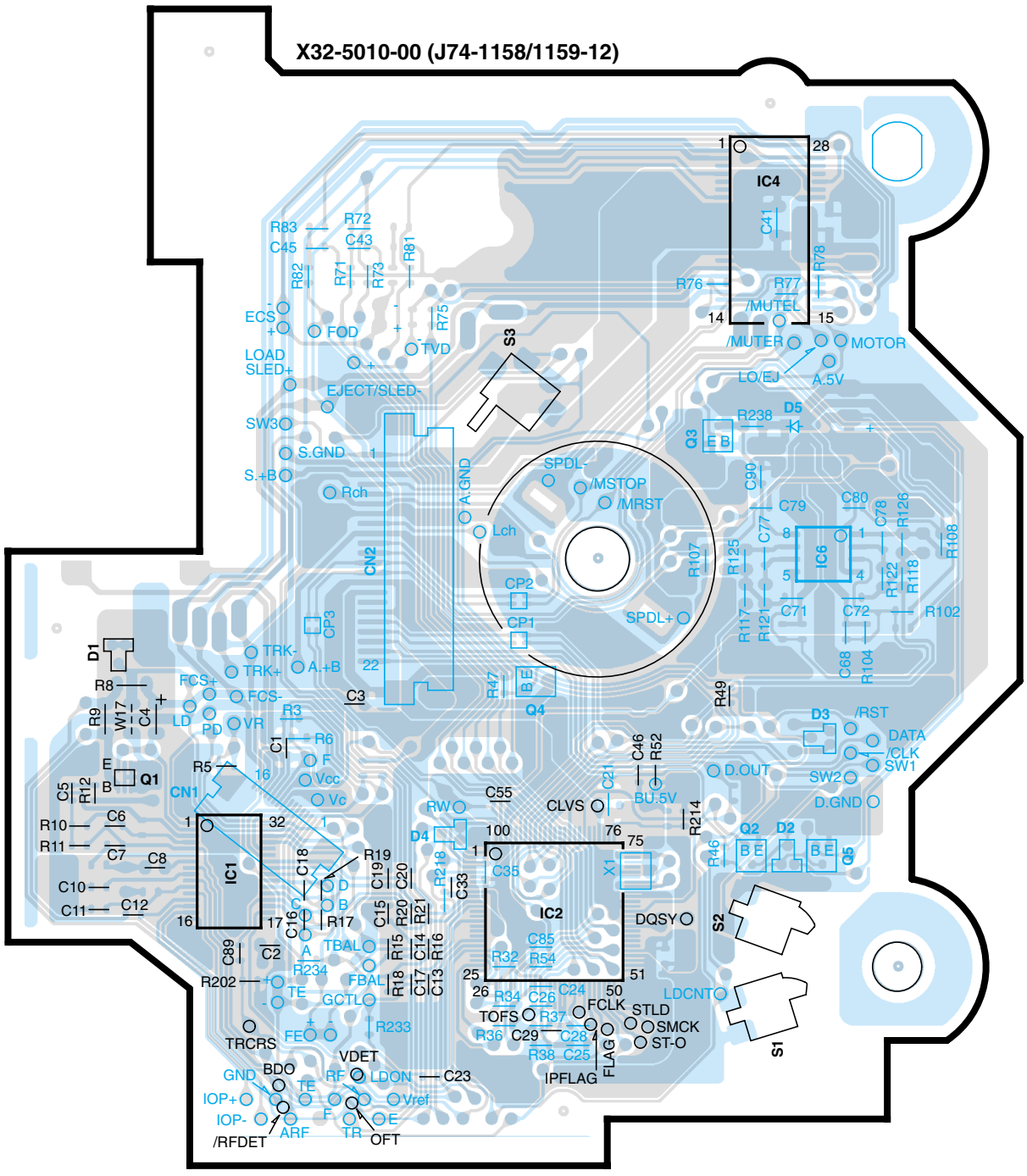
ATTENTION

ssembly of FPC(Flexible PC board) onto Roller ass'y

Turn Roller ass'y by 2 times.
Hook the end of Roller ass'y to the tongue.
Insert the FPC into the slit of Roller ass'y then release the end of Roller ass'y and the tongue.



PC BOARD (COMPONENT SIDE VIEW)

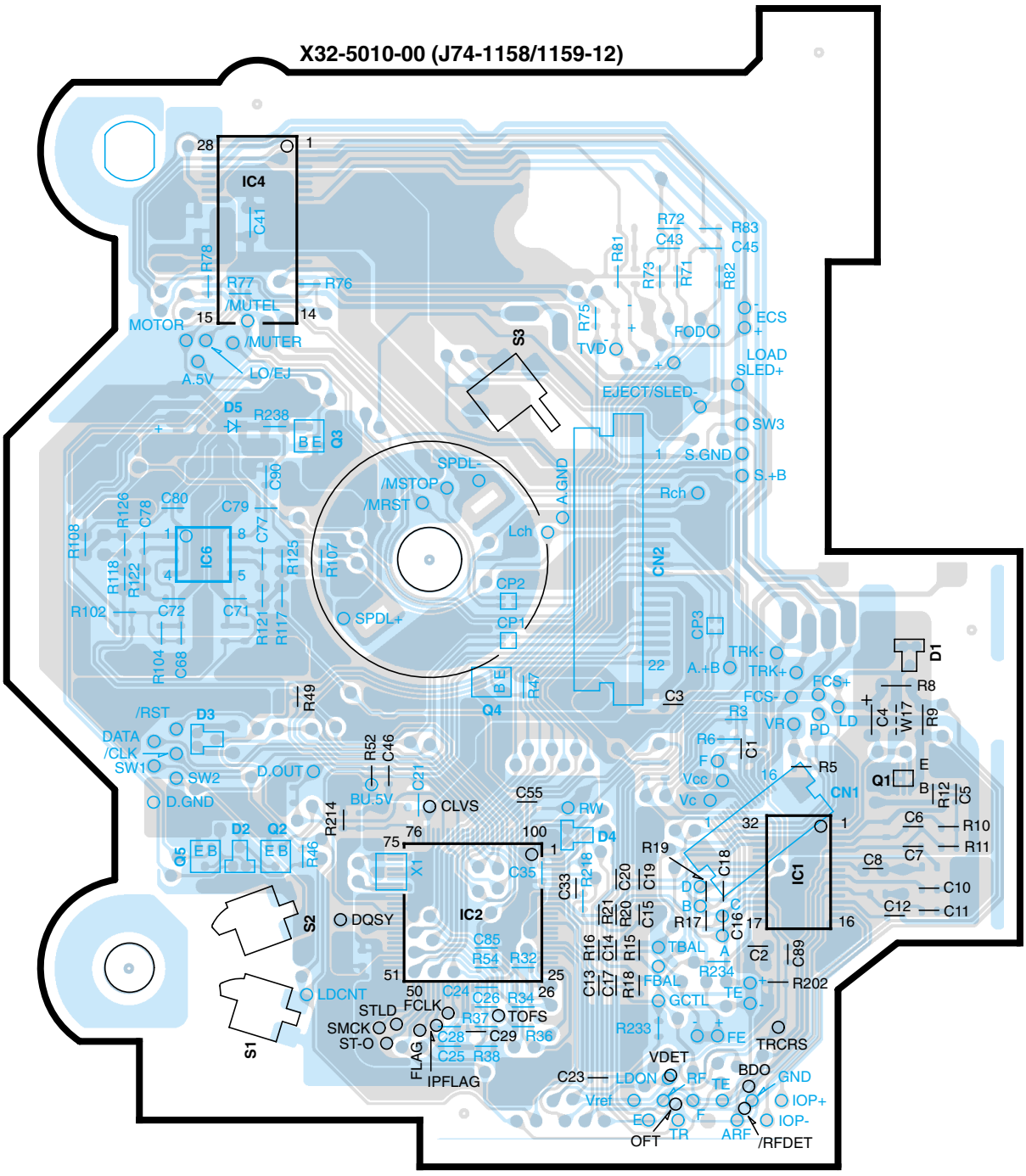


X32-5010-00

IC	1	2	4	6					
Q					1	2	3	4	5
Addres	5B	5C	2D	4D	5A	5D	3D	4C	5D

Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD (FOIL SIDE VIEW)



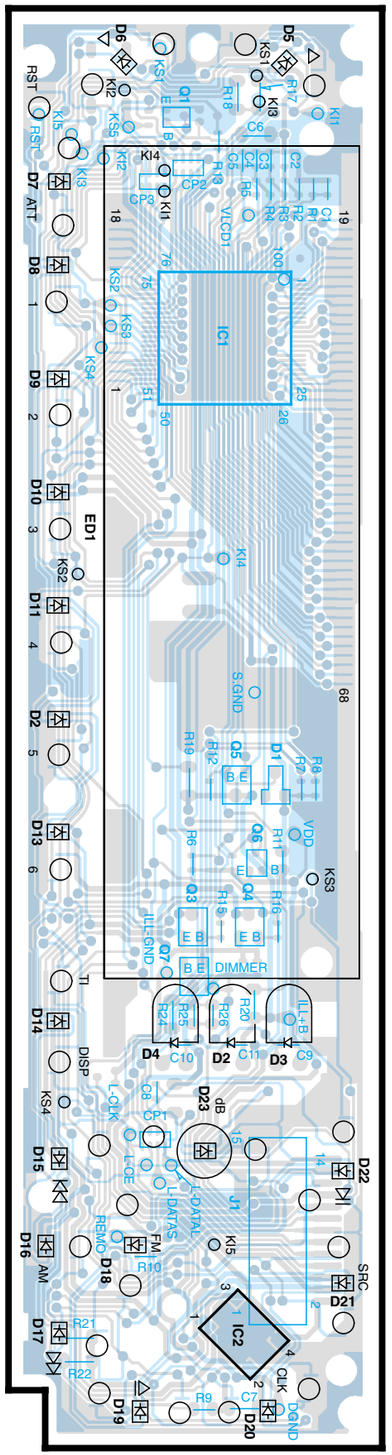
X32-5010-00

IC	1	2	4	6					
Q					1	2	3	4	5
Addres	5I	5H	2G	4G	5J	5G	3G	4H	5G

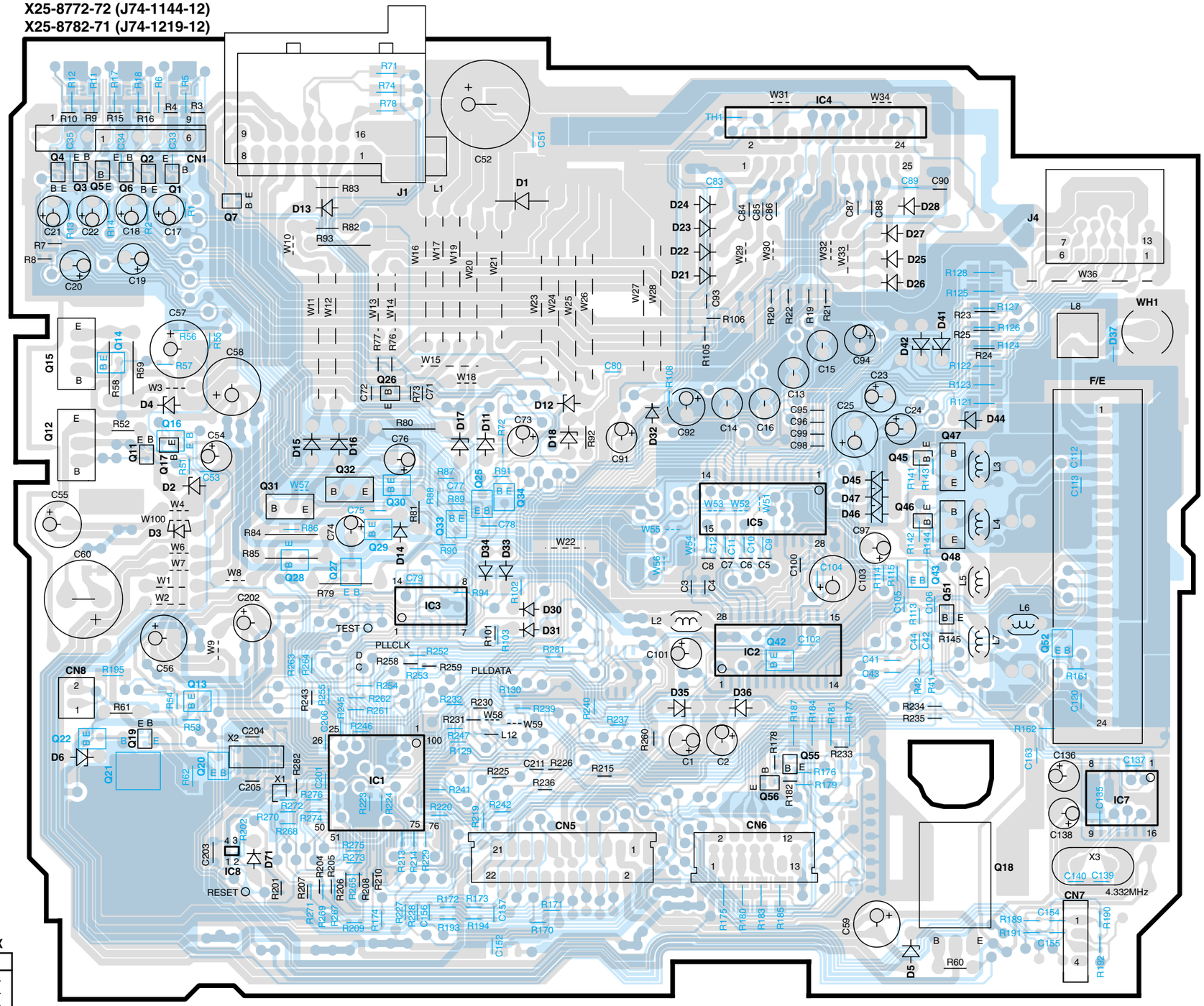
Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD (COMPONENT SIDE VIEW)

X13-9960-12 (J74-1184-12)
X13-9992-72 (J74-1222-12)



X25-8772-72 (J74-1144-12)
X25-8782-71 (J74-1219-12)



X13-99XX-XX

IC	Q	
1		3L
2		7L
	1	2L
	3	5L
	4	5L
	5	4L
	6	5L
	7	5L

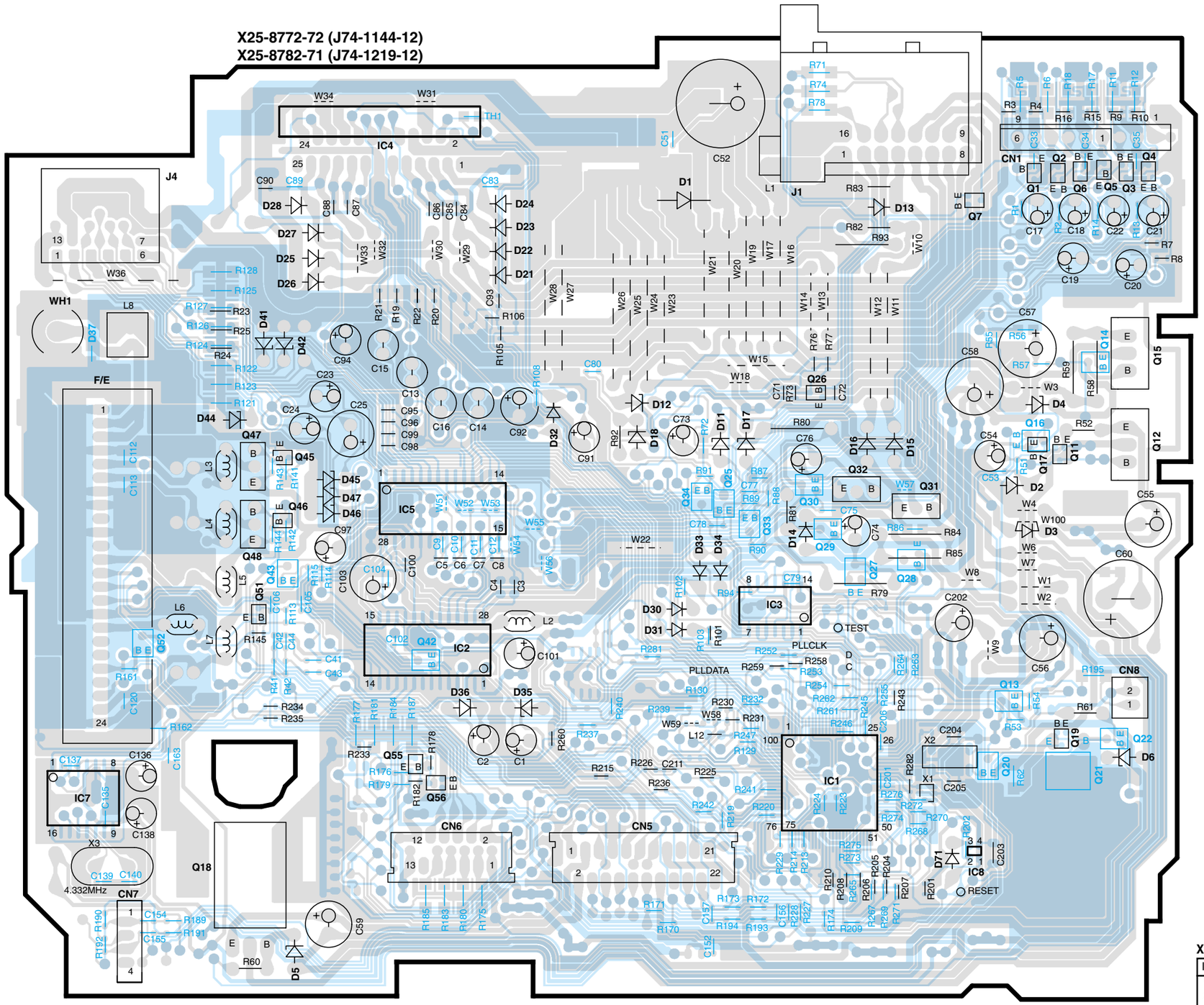
X25-87XX-XX

IC	Q	
1		5O
2		5Q
3		4O
4		2R
7		6S
8		6N
	1	2N
	2	2N
	5	2M
	6	2N
	7	2N
	11	4N
	12	4M
	13	5N
	14	3N
	15	3M
	16	3N
	17	4N
	18	6S
	19	5N
	20	5N
	21	5M
	22	5M
	26	3O
	27	4O
	29	4O
	30	4O
	32	4O
	33	4O
	34	4P
	42	5Q
	43	4R
	45	4R
	46	4R
	47	4R
	48	4R
	51	4R
	52	5S
	55	5Q
	56	5Q

Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD (FOIL SIDE VIEW)

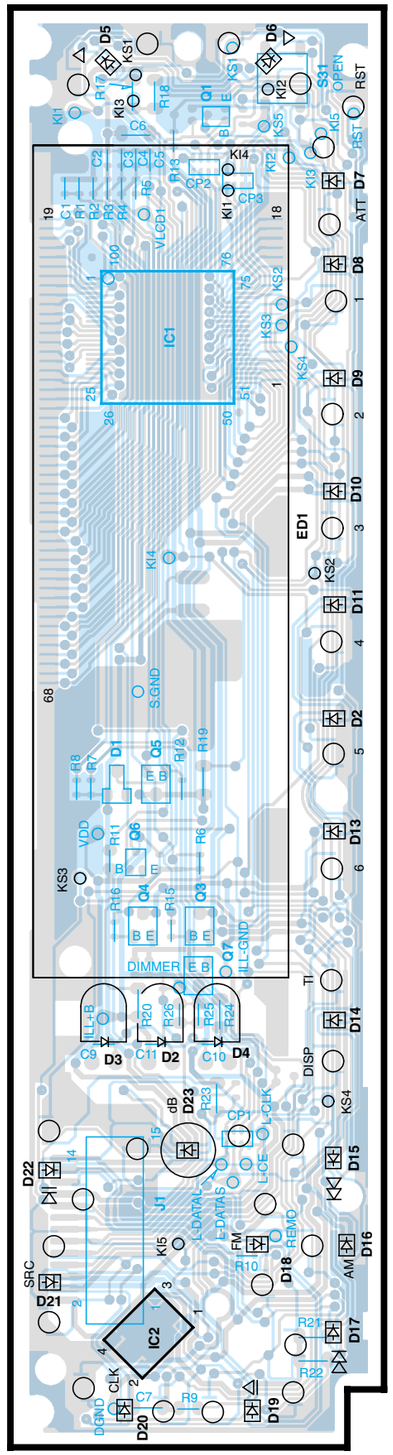
X25-8772-72 (J74-1144-12)
X25-8782-71 (J74-1219-12)



X25-87XX-XX

IC	Q	
1		5Z
2		5X
3		4Z
4		2X
7		6V
8		6AA
	1	2AA
	2	2AA
	5	2AB
	6	2AA
	7	2AA
	11	4AA
	12	4AB
	13	5AA
	14	3AB
	15	3AB
	16	3AA
	17	4AA
	18	6W
	19	5AA
	20	5AA
	21	5AB
	22	5AB
	26	3Z
	27	4Z
	29	4Z
	30	4Z
	32	4Z
	33	4Z
	34	4Y
	42	5X
	43	4W
	45	4W
	46	4W
	47	3W
	48	4W
	51	4W
	52	5V
	55	5X
	56	5X

X13-9960-12 (J74-1184-12)
X13-9992-72 (J74-1222-12)

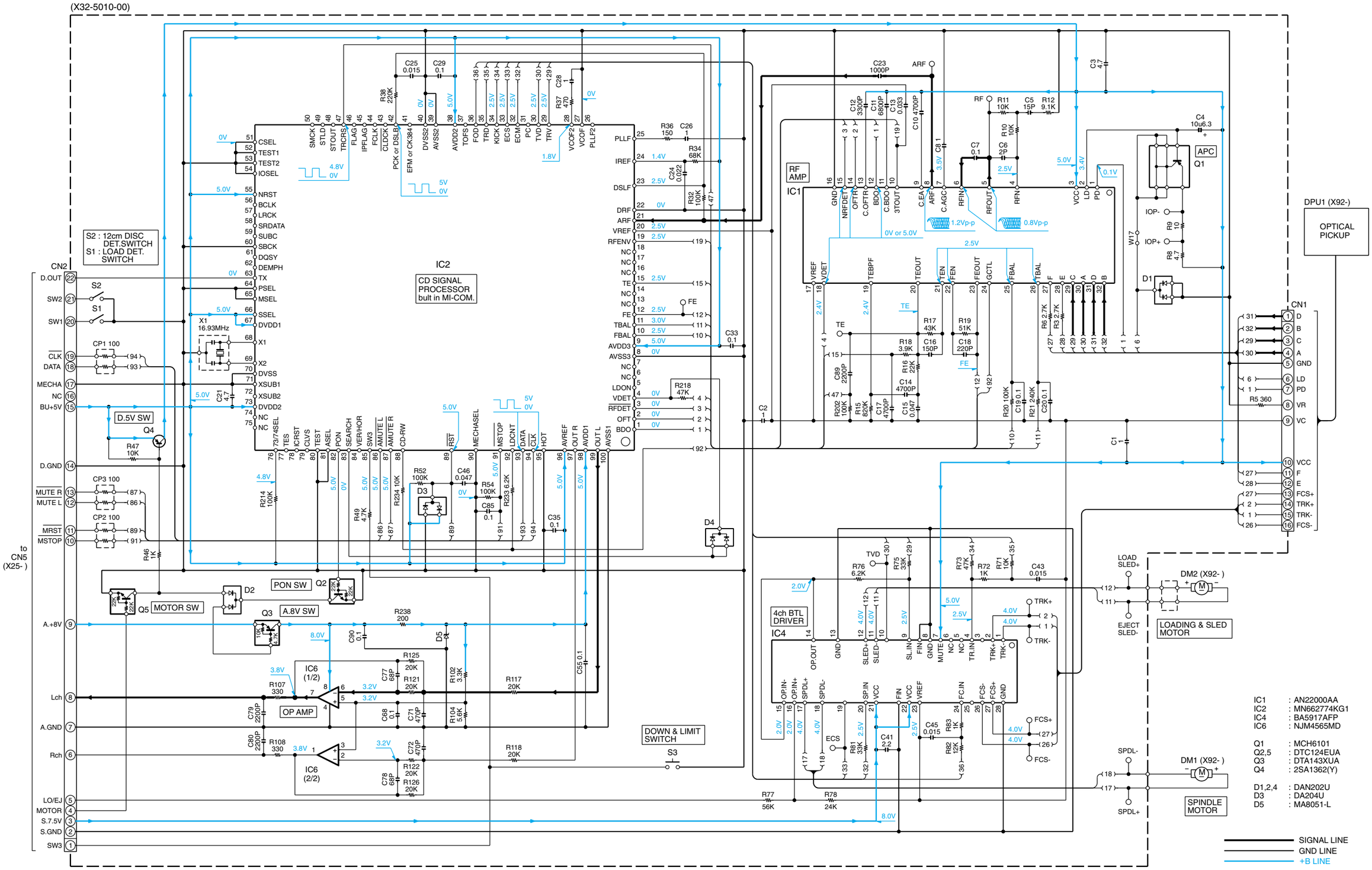


X13-99XX-XX

IC	Q	
1		3AC
2		7AC
	1	2AD
	3	5AD
	4	5AC
	5	4AC
	6	5AC
	7	5AD

Refer to the schematic diagram for the values of resistors and capacitors.

(X32-5010-00)



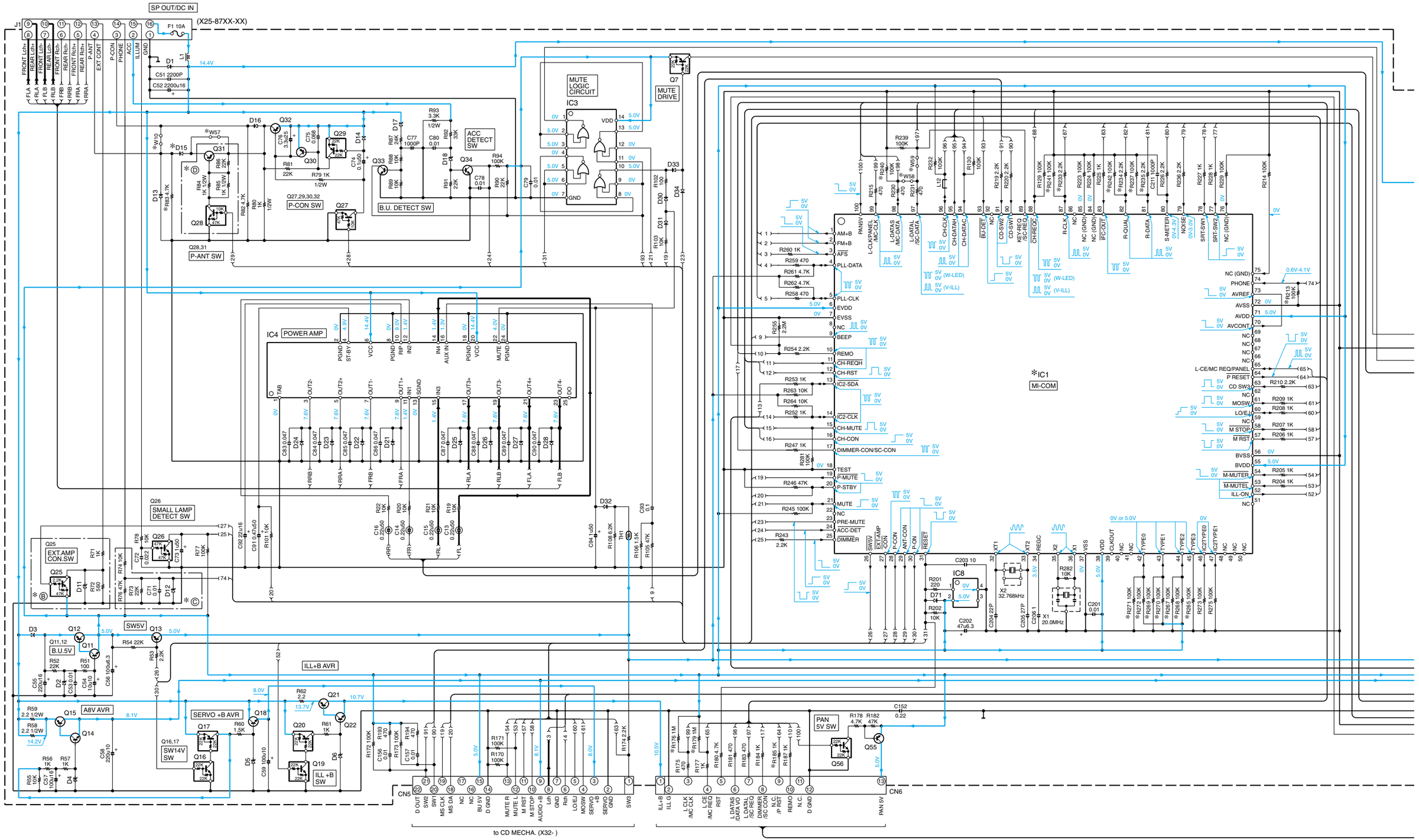
CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

• DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual

KDC-5090R/RY

KENWOOD



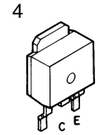
CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

• DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual

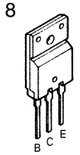
DTC114YUA
DTC143TUA
DTC143ZK
UN5213
UN5214
2SA1362
2SA1576A

2SB1218A
2SC2412K
2SD1819A
2SD2114K

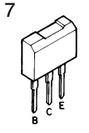


2SB1184

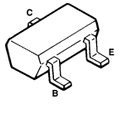
2SB1548



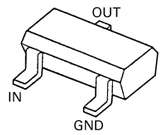
2SB1277

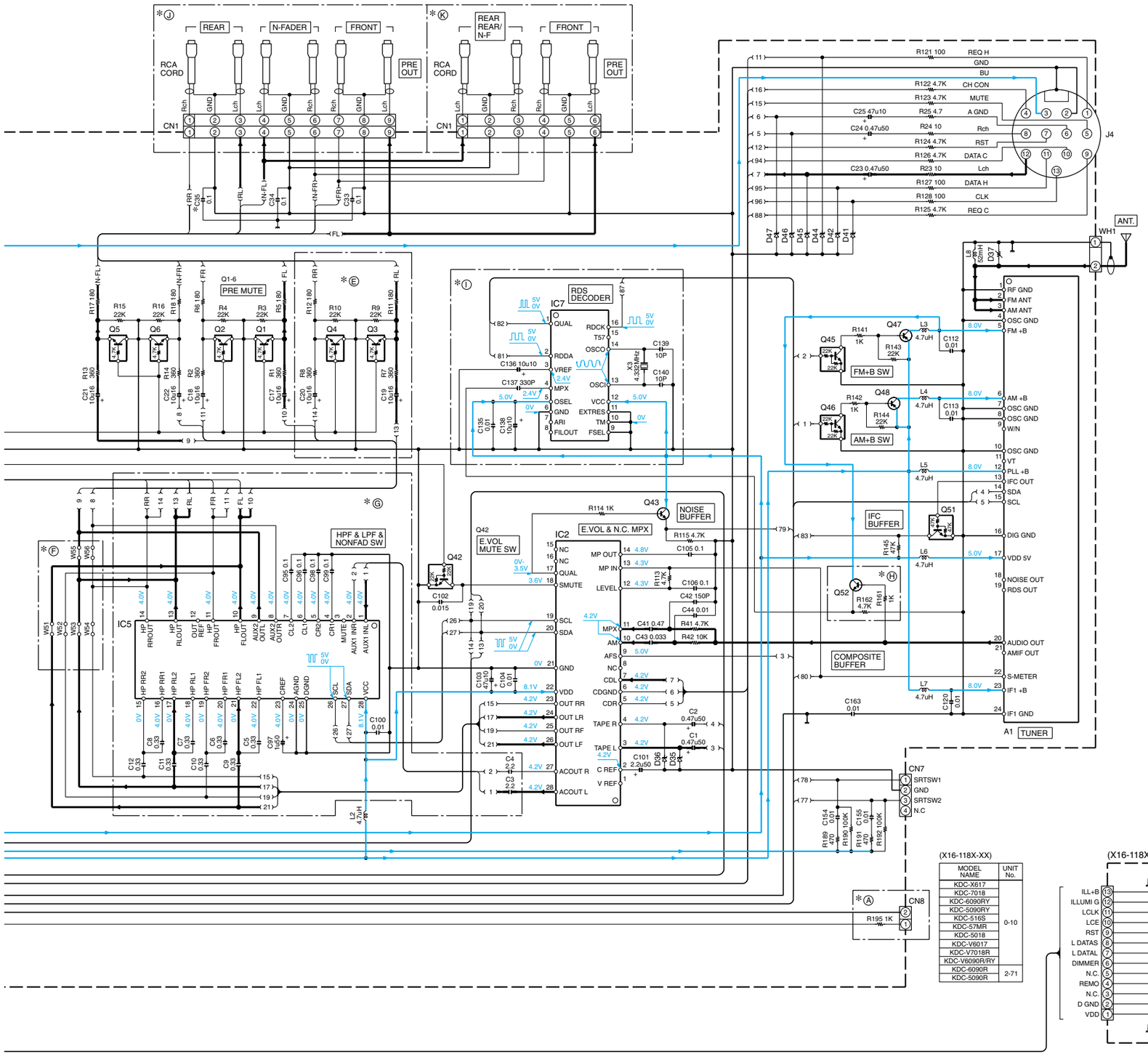


2SC4081



DTA114EUA
DTA124EUA
DTC124EUA
DTC144EUA





(X25-87XX-XX)

MODEL NAME	UNIT No.	Ⓐ	Ⓑ	Ⓒ Ⓗ Ⓘ	Ⓓ	Ⓔ	Ⓕ Ⓙ	Ⓖ	Ⓚ
KDC-X617	70-10	NO	YES	NO	YES	YES	NO	YES	NO
KDC-7018	70-21	NO	YES	NO	YES	YES	NO	YES	NO
KDC-6090RY	72-71	NO	YES	YES	NO	NO	NO	YES	YES
KDC-6090R	82-70	NO	YES	YES	NO	NO	NO	YES	YES
KDC-5090RY	72-72	NO	NO	YES	NO	NO	YES	NO	YES
KDC-5090R	82-71	NO	NO	YES	NO	NO	YES	NO	YES
KDC-V6017	70-11	NO	NO	NO	YES	NO	YES	NO	YES
KDC-V7018R	70-22	NO	YES	YES	NO	NO	YES	NO	YES
KDC-V6090RY	72-73	NO	YES	YES	NO	NO	YES	NO	YES
KDC-V6090R	82-72	NO	YES	YES	NO	NO	YES	NO	YES
KDC-516S	70-12	NO	NO	NO	YES	NO	YES	NO	YES
KDC-5018	70-23	NO	YES	NO	YES	NO	YES	NO	YES
KDC-57MR	70-13	YES	NO	NO	YES	NO	YES	NO	YES

MODEL NAME	D15	C35	IC1	R83	R176, 265	R179, 185,240	R213,237, 241,242
KDC-X617	YES	YES	UPD703033GC057	YES	YES	NO	YES
KDC-7018	YES	YES	UPD703033GC057	YES	YES	NO	YES
KDC-6090RY	YES	NO	UPD703033GC057	YES	YES	NO	NO
KDC-6090R	YES	NO	UPD703033GC057	YES	YES	NO	NO
KDC-5090RY	YES	NO	UPD703033GC057	YES	YES	NO	NO
KDC-5090R	YES	NO	UPD703033GC057	YES	YES	NO	NO
KDC-V6017	YES	NO	UPD703033GC078	YES	NO	YES	YES
KDC-V7018R	NO	NO	UPD703033GC076	NO	NO	YES	NO
KDC-V6090RY	YES	NO	UPD703033GC076	YES	NO	YES	NO
KDC-V6090R	YES	NO	UPD703033GC076	YES	NO	YES	NO
KDC-516S	YES	NO	UPD703033GC057	YES	YES	NO	YES
KDC-5018	YES	NO	UPD703033GC057	YES	YES	NO	YES
KDC-57MR	YES	NO	UPD703033GC057	YES	YES	NO	YES

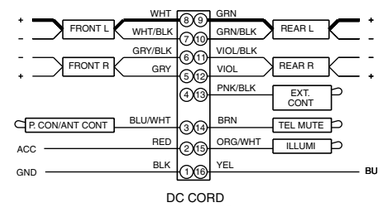
MODEL NAME	R233-235	R267	R268	R269	R270	R271	R272	W10	W57	W58	W59
KDC-X617	NO	YES	NO	YES	NO	YES	NO	NO	NO	NO	YES
KDC-7018	NO	YES	NO	YES	NO	NO	YES	NO	NO	NO	YES
KDC-6090RY	YES	YES	NO	NO	YES	YES	NO	NO	YES	NO	YES
KDC-6090R	YES	YES	NO	NO	YES	YES	NO	NO	YES	NO	YES
KDC-5090RY	YES	YES	NO	NO	YES	NO	YES	NO	YES	NO	YES
KDC-5090R	YES	YES	NO	NO	YES	NO	YES	NO	YES	NO	YES
KDC-V6017	NO	NO	NO	YES	NO	YES	NO	NO	NO	YES	NO
KDC-V7018R	YES	NO	NO	NO	YES	YES	NO	NO	YES	YES	NO
KDC-V6090RY	YES	NO	NO	NO	YES	YES	NO	NO	YES	YES	NO
KDC-V6090R	YES	NO	NO	NO	YES	YES	NO	NO	YES	YES	NO
KDC-516S	NO	NO	NO	YES	NO	YES	NO	NO	NO	NO	YES
KDC-5018	NO	NO	NO	YES	NO	YES	NO	NO	NO	NO	YES
KDC-57MR	NO	NO	YES	YES	NO	NO	YES	NO	NO	NO	YES

IC1 : ✻
IC2 : TDA7407D
IC3 : HD74HC02FP or TC74HC02AF
IC4 : TA8263BH
IC5 : TDA7401
IC7 : TDA7479D
IC8 : S-80837ANNP

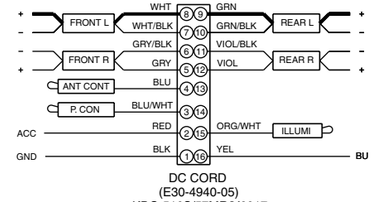
Q1-6 : DTC143TUA or KRC410
Q7,17,20,29 : DTA124EUA or KRA303
Q11,14,22,33,34,43,52 : 2SC4081 or 2SD1819A
Q12,15 : 2SB1548(P)
Q13,30,55 : 2SA1576A or 2SB1218A
Q16,19,42,45,46,56 : DTC124EUA or UN5212
Q18 : 2SD2375
Q21 : 2SB1184
Q25 : DTA123JK or KRA105S
Q26,51 : DTC144EUA or UN5213
Q27,28 : DTC114YUA or UN5214
Q31,32,47,48 : 2SB1277(Q,R)

D1 : RM10ZLF
D2 : MA4056(N)-M
D3 : 1GWJ43
D4 : MA4091(N)-L
D5 : MA4082(N)-L or HZS9A2L
D6 : MA4110-L or HZS11B2
D11 : MA4056-M or HZS6B1
D12 : MA4047-M or HZS5B1
D13,15,16,21-28 : AM01Z or DSM1SD2 or ERA15-02
D14,30-34,71 : 1SS133
D17,18,35,36,45-47 : MA4068(N)-M
D37 : IMSA-6081 or SA-C2012-101TB
D41,42,44 : MA4062-L or HZS6C1

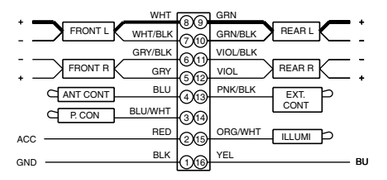
SIGNAL LINE
GND LINE
+B LINE



DC CORD
(E30-4941-05)
KDC-V7018R



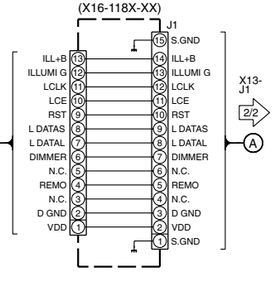
DC CORD
(E30-4940-05)
KDC-516S/57MR/V6017

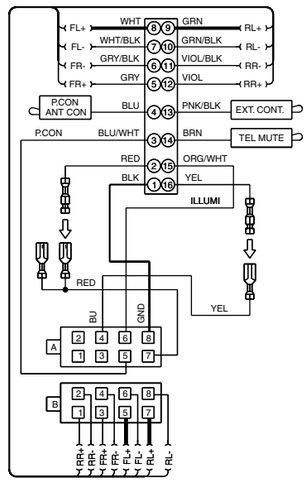


DC CORD
(E30-4939-05)
KDC-X617/7018/5018

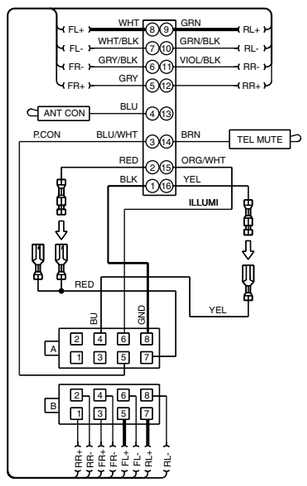
(X16-118X-XX)

MODEL NAME	UNIT No.
KDC-X617	0-10
KDC-7018	
KDC-6090RY	
KDC-5090RY	
KDC-516S	
KDC-57MR	
KDC-5018	
KDC-V6017	
KDC-V7018R	
KDC-V6090RY/RY	
KDC-6090R	2-71
KDC-5090R	



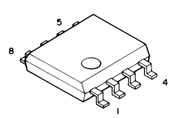


DC CORD
(E30-4943-05)
KDC-6090RY/V6090RY
(E30-4957-05)
KDC-6090R/V6090R



DC CORD
(E30-4944-05)
KDC-5090RY
(E30-4958-05)
KDC-5090R

NJM4565MD

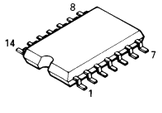


DAN202U

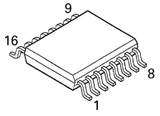
DA204U

UN5212

TC74HC02AF



TDA7479D



(X13-99XX-XX)

ED1(SEGMENT)

ED1(COMMON)

IN ch LOW MID HIGH Q CONTROL ST MTL P/S PTY TI ATT NEWS B NR RDS LOUD DAB AUTO 1 2 6X9/6inch 5/4inch O.E.M. SP

J1 (X16-) S.GND ILL+B ILLUM G L CLK L CE RESET L DATAS L DATAL DIMMER NC REMO NC D GND VDD S.GND

CP1 470 RST R8 22K R12 750 Q5 VLCD AVR D1 C5 0.1 R10 1K C7 2.2 R9 100 R11 4.7 C6 2.2 R6 1K

IC2 REMOTE CONTOROLL SENSOR Q6 REMO SW

KEY PERMISSION SW Q1 CP2 1K CP3 1K R13 1K

IC1 LCD DRIVER

C4 0.1 C3 0.1 C2 0.1 R5 2.2K R4 2.2K R3 2.2K R2 2.2K C1 680P R1 43K R7 22K

VOL+ VOL- ATT 1 2 3 4 5 6 SRC DISP AM dB FM TI EJECT CLK

RED GRN Q3 Q4 R15 10K R16 10K DIMMER Q7 47K

D1 D2 D3 D4 D5 D6 D7 D8 D9 D10 D11 D12 D13 D14 D15 D16 D17 D18 D19 D20 D21 D22 D23 C9 0.01 C10 0.01 C11 0.01 R17 330 R18 330 R19 330 R20 330 R21 330 R22 510 R23 510 R24 330 R25 1.2K R26 1.2K

KDC-5090R/5090RY (2/2)

IC1 : LC75808W
IC2 : RS-171

Q1,6 : DTA114EUA or KRA302
Q3,4 : 2SD2114K
Q5 : 2SC2412K or 2SD601A
Q7 : DTC143ZUA

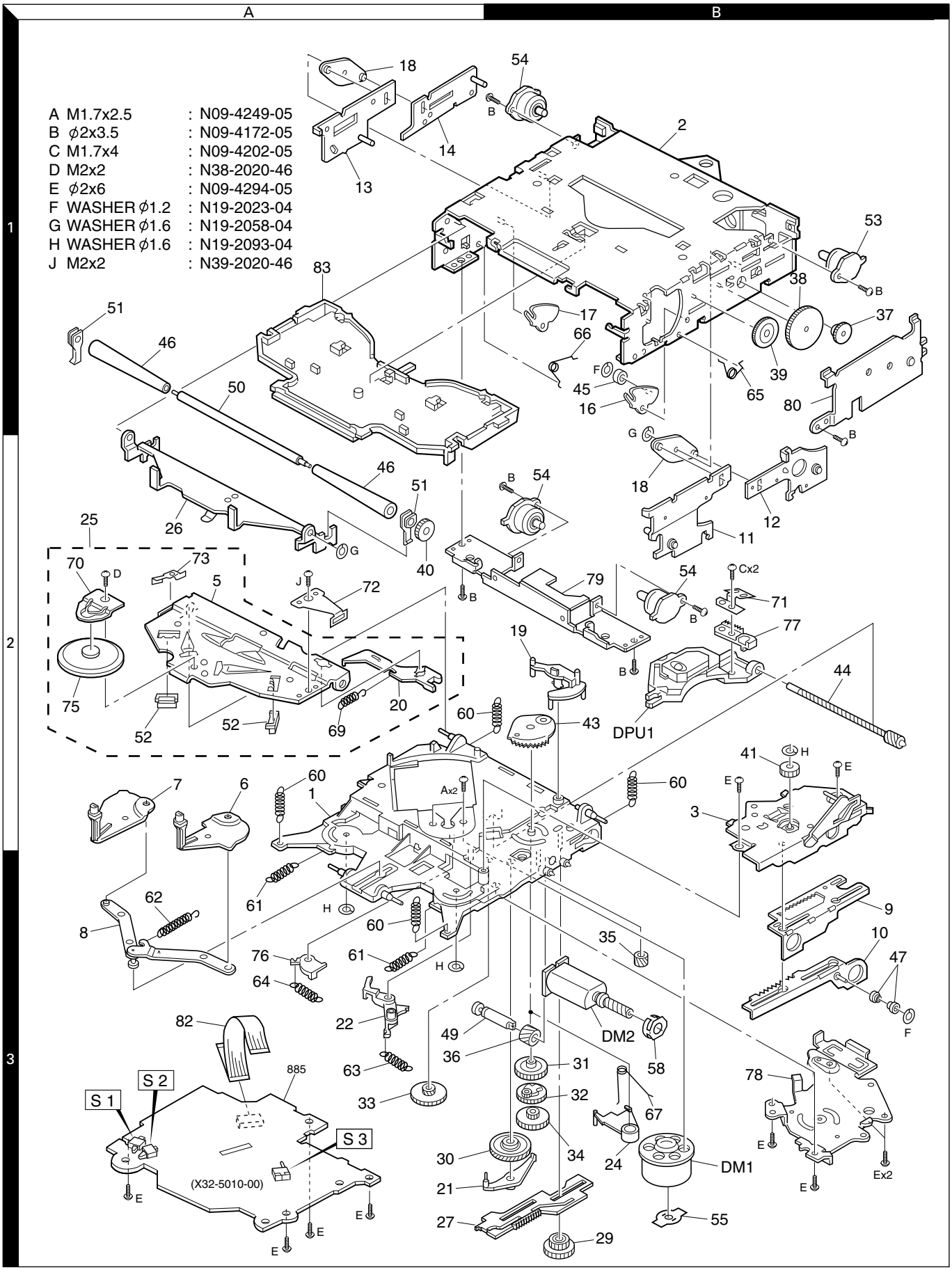
D1 : MA3091-M
D2-4 : B30-1571-05
D5-23 : B30-1605-05

MODEL NAME	UNIT No.
KDC-5090RY	X13-9960-12
KRC-5090R	X13-9992-72

GND LINE
+B LINE

KDC-5090R/RY
KENWOOD

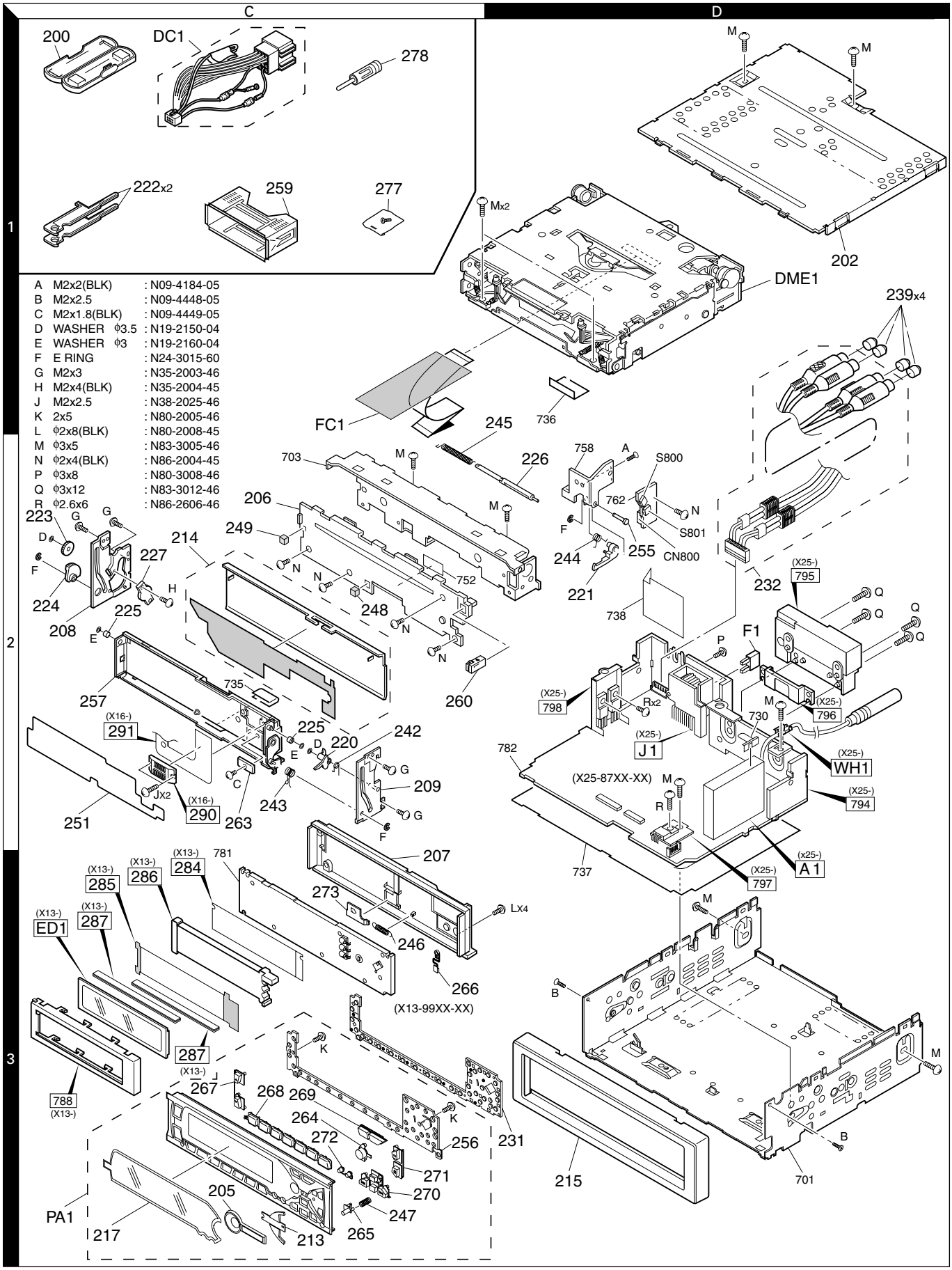
EXPLODED VIEW (MECHANISM)



Parts with the exploded numbers larger than 700 are not supplied.

KDC-5090R/RY

EXPLODED VIEW (UNIT)



Parts with the exploded numbers larger than 700 are not supplied.

PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No.	Add	New	Parts No.	Description	Destination
			KDC-5090R / RY		
200	1C		A02-1497-03	PLASTIC CABINET ASSY	
202	1D	*	A52-0779-02	TOP PLATE	
205	3C		A21-4073-03	DRESSING PANEL	
206	2C	*	A22-2853-23	SUB PANEL ASSY	
207	3C		A46-1692-01	REAR COVER	
208	2C	*	A50-1019-04	SIDE PLATE ASSY (L)	
209	2C	*	A50-1022-04	SIDE PLATE ASSY (R)	
PA1	3C	*	A64-2171-02	PANEL ASSY	
213	3C	*	B03-3071-03	DRESSING PLATE	
214	2C	*	B03-3075-02	DRESSING PLATE (BLK)	
215	3D		B07-3007-03	ESCUTCHEON ASSY (BLK)	
217	3C	*	B10-3273-01	FRONT GLASS	
-			B46-0100-50	WARRANTY CARD	E1
-			B46-0632-04	ID CARD	
-			B58-1376-04	CAUTION CARD	
-		*	B64-1867-00	INST. MANUAL (ENG,RUS,POL)	E2
-		*	B64-1868-00	INST. MANUAL (CZE,HUN,CRO)	E2
-		*	B64-1869-00	INST. MANUAL (SWE,FIN)	E2
-		*	B64-1873-00	INST. MANUAL (ENGLISH)	E1
-		*	B64-1874-00	INST. MANUAL (FRE,GER,DUT)	E1
-		*	B64-1875-00	INST. MANUAL (ITA,SPA,POR)	E1
220	2C	*	D10-4557-04	LEVER (SRT POSITION SW)	
221	2D	*	D10-4558-04	ARM (RELEASE)	
222	1C	*	D10-4562-04	LEVER	
222	1C	*	D10-4621-04	LEVER	E1
223	2C	*	D13-2117-04	GEAR (IDOL)	
224	2C	*	D13-2118-04	GEAR (ARM)	
225	2C		D14-0751-04	ROLLER (PANEL)	
226	2D		D14-0752-03	ROLLER (FPC)	
227	2C		D39-0244-05	DAMPER	
231	3D		E29-1824-02	CONDUCTIVE RUBBER (KEY)	
232	2D	*	E30-4935-05	CORD WITH PINPLUG	
CN800	2D		E41-0070-05	SOCKET FOR PIN ASSY (4P)	
⚠ DC1	1C		E30-4944-05	DC CORD	E2
⚠ DC1	1C	*	E30-4958-05	DC CORD	E1
FC1	1C	*	E39-0375-05	FLAT CABLE	
239	1D		F29-0049-05	INSULATING COVER	
⚠ F1	2D		F52-0006-05	FUSE(MINI BLADE TYPE) (10A)	
⚠ F1	2D		F52-0011-05	FUSE(MINI BLADE TYPE) (10A)	E2
242	2C	*	G01-3057-04	TORSION COIL SPRING (SW LEVER)	
243	2C	*	G01-3058-04	TORSION COIL SPRING (MAIN)	
244	2D	*	G01-3059-04	TORSION COIL SPRING (RELEASE)	
245	1D	*	G01-3060-04	TORSION COIL SPRING (FPC ROLL)	
246	3C	*	G01-3069-04	EXTENSION SPRING (LOCK)	
247	3C	*	G01-3070-04	COMPRESSION SPRING (RELEASE)	
248	2C	*	G11-1919-04	CUSHION (SUB PANEL MIDDLE)	
249	2C	*	G11-1920-24	CUSHION (SUB PANEL LEFT)	
251	2C	*	G16-1178-04	SHEET (CAUTION)	
-		*	H10-4762-12	POLYSTYRENE FOAMED FIXTURE	E1
-		*	H10-4763-12	POLYSTYRENE FOAMED FIXTURE	E2
-			H25-0329-04	PROTECTION BAG (280X450X0.03)	E2
-			H25-0337-04	PROTECTION BAG (180X300X0.03)	
-			H25-1108-04	PROTECTION BAG (100X300X0.03)	
-			H25-1111-04	PROTECTION BAG (280X450X0.03)	E1
-		*	H54-2001-03	ITEM CARTON CASE	E2
-		*	H54-2004-03	ITEM CARTON CASE	E1
255	2D	*	J12-1156-04	PIN (RELEASE)	
256	3C	*	J19-5036-02	HOLDER	
257	2C	*	J21-9613-12	MOUNTING HARDWARE ASSY (PANEL)	
259	1C	*	J21-9641-13	MOUNTING HARDWARE ASSY	
260	2C		J52-0604-05	PUSH LATCH	
263	2C	*	J90-0999-04	GUIDE (PANEL MECHA)	
264	3C		K24-3647-04	KNOB (DB)	
265	3C		K24-3648-04	KNOB (RELEASE)	
266	3C		K24-3658-04	KNOB (RELEASE2)	
267	3C		K25-1222-03	KNOB (VOL)	
268	3C		K25-1223-03	KNOB (PRESET)	
269	3C		K25-1224-03	KNOB (SRC)	
270	3C		K25-1225-03	KNOB (FM,AM)	
271	3C		K25-1226-03	KNOB (EJECT)	
272	3C		K25-1227-03	KNOB (DISP)	
273	3C		K29-7017-03	KNOB (LOCK)	
277	1C		N99-1704-05	SCREW SET	
A	2D		N09-4184-05	MACHINE SCREW (M2X2 BLK)	
B	3D		N09-4448-05	MACHINE SCREW	
C	2C		N09-4449-05	MACHINE SCREW	
D	2C		N19-2150-04	FLAT WASHER (1.6X3.5X0.25)	
E	2C		N19-2160-04	FLAT WASHER (1.2X3.0X0.25)	
F	2C		N24-3015-60	E TYPE RETAINING RING	
G	2C		N35-2003-46	BINDING HEAD MACHINE SCREW	
H	2C		N35-2004-45	BINDING HEAD MACHINE SCREW	
J	2C		N38-2025-46	PAN HEAD MACHIN SCREW	
K	3C		N80-2005-46	PAN HEAD TAPTITE SCREW	
L	3D		N80-2008-45	PAN HEAD TAPTITE SCREW	
M	1D		N83-3005-46	PAN HEAD TAPTITE SCREW	
N	2C		N86-2004-45	BINDING HEAD TAPTITE SCREW	
S800,801	2D		S68-0830-05	PUSH SWITCH	
278	1C		T90-0523-05	ANTENNA ADAPTOR	
278	1C		T90-0534-05	ANTENNA ADAPTOR	
DME1	1D		X92-4130-00	MECHANISM ASSY (DXM-1062)	
			SWITCH UNIT (X13-99XX-XX)		
284	3C	*	B11-1347-04	REFLECTION SHEET	
285	3C	*	B11-1324-04	OPTICAL DIFFUSER	
286	3C	*	B19-2062-03	LIGHTING BOARD	
D2 -4			B30-1571-05	LED(WHITE)	
D5 -23			B30-1605-05	LED(2COLOR PG/RED)	
ED1	3C	*	B38-1064-05	LIQUID CRYSTAL	
C1			CC73GCH1H681J	CHIP C 680PF J	
C2 -5			CK73GB1C104K	CHIP C 0.10UF K	
C2 -5			CK73GB1H104K	CHIP C 0.10UF K	
C6 ,7			CK73EB1C225K	CHIP C 2.2UF K	
C9 -11			CK73GB1H103K	CHIP C 0.010UF K	

E1: KDC-5090R **E2:** KDC-5090RY

⚠ indicates safety critical components.

KDC-5090R/RY

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Ref. No.	Add	New	Parts No.	Description	Destination
287	3C		E29-1596-04	CONDUCTIVE RUBBER	
J1			E59-0835-05	RECTANGULAR PLUG (15P)	
CP1			R90-1016-05	MULTI-COMP 470 X4	
CP2 ,3			R90-0724-05	MULTI-COMP 1K X4	
R1			RK73GB1J433J	CHIP R 43K J 1/16W	
R2 -5			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R6			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R7 ,8			RK73GB1J223J	CHIP R 22K J 1/16W	
R9			RK73FB2A101J	CHIP R 100 J 1/10W	
R10			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R11			RK73FB2A4R7J	CHIP R 4.7 J 1/10W	
R12			RK73GB1J751J	CHIP R 750 J 1/16W	
R13			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R15 ,16			RK73GB1J103J	CHIP R 10K J 1/16W	
R17 -21			RK73EB2B331J	CHIP R 330 J 1/8W	
R22 ,23			RK73EB2B511J	CHIP R 510 J 1/8W	
R24			RK73EB2B331J	CHIP R 330 J 1/8W	
R25 ,26			RK73FB2A122J	CHIP R 1.2K J 1/10W	
D1			MA3091-M	ZENER DIODE	
IC1			LC75808W	MOS-IC	
IC2			RS-171	ANALOGUE IC	
Q1			DTA114EUA	DIGITAL TRANSISTOR	
Q1			KRA302	DIGITAL TRANSISTOR	E2
Q3 ,4			2SD2114K	TRANSISTOR	
Q5			2SC2412K	TRANSISTOR	
Q5			2SD601A	TRANSISTOR	E2
Q6			DTA114EUA	DIGITAL TRANSISTOR	
Q6			KRA302	DIGITAL TRANSISTOR	E2
Q7			DTC143ZK	DIGITAL TRANSISTOR	
SUB-CIRCUIT UNIT (X16-118X-XX)					
290	2C		E58-0903-05	RECTANGULAR RECEPTACLE (15P)	
291	2C		J84-0121-12	FLEXIBLE PRINTED WIRING BOARD	
ELECTRIC UNIT (X25-87XX-XX)					
C1 ,2			C90-2606-05	ELECTRO 0.47UF 50WV	
C13 -16			C90-5296-05	NP-ELECT 0.22UF 50WV	
C17 ,18			C90-2597-05	ELECTRO 10UF 16WV	
C21 ,22			C90-2597-05	ELECTRO 10UF 16WV	
C23 ,24			C90-2606-05	ELECTRO 0.47UF 50WV	
C25			CE04CW1A470M	ELECTRO 47UF 10WV	
C33 ,34			CK73FB1E104K	CHIP C 0.10UF K	
C41			CK73GB1A474K	CHIP C 0.47UF K	
C42			CC73GCH1H151J	CHIP C 150PF J	
C43			CK73GB1E333K	CHIP C 0.033UF K	
C43			CK73GB1H333K	CHIP C 0.033UF K	
C44			CK73GB1H103K	CHIP C 0.010UF K	
C51			CK73GB1H222K	CHIP C 2200PF K	
C52			C90-5235-05	ELECTRO 2200UF 16WV	
C53			CK73GB1H103K	CHIP C 0.010UF K	
C54			C90-2594-05	ELECTRO 10UF 10WV	
C55			C90-2866-05	ELECTRO 220UF 16WV	
C56			CE04CW0J101M	ELECTRO 100UF 6.3WV	
C57			CE04CW1C101M	ELECTRO 100UF 16WV	

SWITCH UNIT (X13-99XX-XX)

Ref. No.	Add	New	Parts No.	Description	Destination
C58			CE04CW1A221M	ELECTRO 220UF 10WV	
C59			CE04CW1A101M	ELECTRO 100UF 10WV	
C71			CK73GB1H103K	CHIP C 0.010UF K	
C72			CK73GB1E223K	CHIP C 0.022UF K	
C72			CK73GB1H223K	CHIP C 0.022UF K	
C73			C90-2608-05	ELECTRO 1.0UF 50WV	
C74			C90-2602-05	ELECTRO 0.10UF 50WV	
C75			CK73GB1C683K	CHIP C 0.068UF K	
C75			CK73GB1H683K	CHIP C 0.068UF K	
C76			C90-2598-05	ELECTRO 3.3UF 25WV	
C77			CK73GB1H102K	CHIP C 1000PF K	
C78 -80			CK73GB1H103K	CHIP C 0.010UF K	
C83 -90			CK73GB1E473K	CHIP C 0.047UF K	
C83 -90			CK73GB1H473K	CHIP C 0.047UF K	
C91			C90-2606-05	ELECTRO 0.47UF 50WV	
C92			CE04CW1C220M	ELECTRO 22UF 16WV	
C93			CK73GB1C104K	CHIP C 0.10UF K	
C93			CK73GB1H104K	CHIP C 0.10UF K	
C94			C90-2608-05	ELECTRO 1.0UF 50WV	
C101			C90-2610-05	ELECTRO 2.2UF 50WV	
C102			CK73GB1H153K	CHIP C 0.015UF K	
C103			CE04CW1A470M	ELECTRO 47UF 10WV	
C104			CK73GB1H103K	CHIP C 0.010UF K	
C105,106			CK73GB1C104K	CHIP C 0.10UF K	
C105,106			CK73GB1H104K	CHIP C 0.10UF K	
C112,113			CK73GB1H103K	CHIP C 0.010UF K	
C120			CK73GB1H103K	CHIP C 0.010UF K	
C135			CK73GB1H103K	CHIP C 0.010UF K	
C136			C90-2594-05	ELECTRO 10UF 10WV	
C137			CC73GCH1H331J	CHIP C 330PF J	
C138			C90-2594-05	ELECTRO 10UF 10WV	
C139,140			CC73GCH1H100D	CHIP C 10PF D	
C152			CK73GB1A224K	CHIP C 0.22UF K	
C154-157			CK73GB1H103K	CHIP C 0.010UF K	
C163			CK73GB1H103K	CHIP C 0.010UF K	
C201			CK73GB1H103K	CHIP C 0.010UF K	
C202			CE04CW0J470M	ELECTRO 47UF 6.3WV	
C203			CK73EB0J106K	CHIP C 10UF K	
C204			CC73GCH1H220J	CHIP C 22PF J	
C205			CC73GCH1H270J	CHIP C 27PF J	
C206			CK73GB0J105K	CHIP C 1.0UF K	
C211			CK73GB1H102K	CHIP C 1000PF K	
CN1			E40-3241-05	PIN ASSY (6P)	
CN5			E40-9550-05	FLAT CABLE CONNECTOR (22P)	
CN6			E40-9557-05	FLAT CABLE CONNECTOR (13P)	
CN7			E40-5448-05	PIN ASSY (4P)	
⚠ J1	2D		E58-0863-15	RECTANGULAR RECEPTACLE (16P)	
J4			E56-0834-05	CYLINDRICAL RECEPTACLE (13P)	
WH1	2D		E30-4804-05	CORD WITH PLUG	
WH1	2D	*	E30-4932-05	CORD WITH PLUG	E2
L1			L33-1170-05	CHOKE COIL ASSY	
L2 -7			L40-4795-91	SMALL FIXED INDUCTOR(4.7UH,J)	
L8			L33-1123-05	LINE FILTER COIL	
L12			L92-0075-05	CHIP FERRITE	

E1: KDC-5090R **E2:** KDC-5090RY

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ELECTRIC UNIT (X25-87XX-XX)

Ref. No.	Add	New	Parts No.	Description			Destination
X1			L78-0821-05	RESONATOR (20MHz)			
X2			L77-2738-05	CRYSTAL RESONATOR (32.768kHz)			
X3			L77-2002-05	CRYSTAL RESONATOR (4.332MHz)			
M	2D		N83-3005-46	PAN HEAD TAPTITE SCREW			
P	2D		N80-3008-46	PAN HEAD TAPTITE SCREW			
Q	2D		N83-3012-46	PAN HEAD TAPTITE SCREW			
R	2D		N86-2606-46	BINDING HEAD TAPTITE SCREW			
R1 ,2			RK73GB1J361J	CHIP R	360	J 1/16W	
R3 ,4			RK73GB1J223J	CHIP R	22K	J 1/16W	
R5 ,6			RK73EB2B181J	CHIP R	180	J 1/8W	
R13 ,14			RK73GB1J361J	CHIP R	360	J 1/16W	
R15 ,16			RK73GB1J223J	CHIP R	22K	J 1/16W	
R17 ,18			RK73EB2B181J	CHIP R	180	J 1/8W	
R19 -22			RK73GB1J103J	CHIP R	10K	J 1/16W	
R23 ,24			RK73EB2B100J	CHIP R	10	J 1/8W	
R25			RK73EB2B4R7J	CHIP R	4.7	J 1/8W	
R41			RK73GB1J472J	CHIP R	4.7K	J 1/16W	
R42			RK73GB1J103J	CHIP R	10K	J 1/16W	
R51			RK73GB1J101J	CHIP R	100	J 1/16W	
R52			RD14BB2C223J	RD	22K	J 1/6W	
R53			RK73GB1J222J	CHIP R	2.2K	J 1/16W	
R54			RK73GB1J223J	CHIP R	22K	J 1/16W	
R55			RK73FB2A103J	CHIP R	10K	J 1/10W	
R56			RK73FB2A102J	CHIP R	1.0K	J 1/10W	
R57			RK73GB1J102J	CHIP R	1.0K	J 1/16W	
R58 ,59			RD14DB2H2R2J	SMALL-RD	2.2	J 1/2W	
R60			RD14BB2C152J	RD	1.5K	J 1/6W	
R61			RD14BB2C102J	RD	1.0K	J 1/6W	
R62			RK73EB2B2R2J	CHIP R	2.2	J 1/8W	
R73			RK73GB1J223J	CHIP R	22K	J 1/16W	
R74			RK73EB2B103J	CHIP R	10K	J 1/8W	
R76			RK73GB1J473J	CHIP R	47K	J 1/16W	
R77			RK73GB1J104J	CHIP R	100K	J 1/16W	
R78			RK73EB2B103J	CHIP R	10K	J 1/8W	
R79 ,80			RD14DB2H102J	SMALL-RD	1.0K	J 1/2W	
R81			RD14BB2C223J	RD	22K	J 1/6W	
R82 ,83			RD14BB2C472J	RD	4.7K	J 1/6W	
R87			RK73FB2A243J	CHIP R	24K	J 1/10W	
R88 ,89			RK73GB1J103J	CHIP R	10K	J 1/16W	
R90 ,91			RK73GB1J223J	CHIP R	22K	J 1/16W	
R92			RD14BB2C333J	RD	33K	J 1/6W	
R93			RD14DB2H332J	SMALL-RD	3.3K	J 1/2W	
R94			RK73GB1J104J	CHIP R	100K	J 1/16W	
R101			RK73GB1J103J	CHIP R	10K	J 1/16W	
R102			RK73GB1J101J	CHIP R	100	J 1/16W	
R103			RK73GB1J103J	CHIP R	10K	J 1/16W	
R105			RK73GB1J473J	CHIP R	47K	J 1/16W	
R106			RK73GB1J152J	CHIP R	1.5K	J 1/16W	
R108			RK73GB1J622J	CHIP R	6.2K	J 1/16W	
R113			RK73GB1J472J	CHIP R	4.7K	J 1/16W	
R114			RK73GB1J102J	CHIP R	1.0K	J 1/16W	
R115			RK73GB1J472J	CHIP R	4.7K	J 1/16W	
R121			RK73EB2B101J	CHIP R	100	J 1/8W	
R122-126			RK73EB2B472J	CHIP R	4.7K	J 1/8W	

Ref. No.	Add	New	Parts No.	Description			Destination
R127,128			RK73EB2B101J	CHIP R	100	J 1/8W	
R129,130			RK73GB1J104J	CHIP R	100K	J 1/16W	
R141,142			RK73EB2B102J	CHIP R	1.0K	J 1/8W	
R143,144			RK73GB1J223J	CHIP R	22K	J 1/16W	
R145			RK73GB1J473J	CHIP R	47K	J 1/16W	
R161			RK73GB1J102J	CHIP R	1.0K	J 1/16W	
R162			RK73GB1J472J	CHIP R	4.7K	J 1/16W	
R170-173			RK73GB1J104J	CHIP R	100K	J 1/16W	
R174			RK73GB1J222J	CHIP R	2.2K	J 1/16W	
R175			RK73EB2B471J	CHIP R	470	J 1/8W	
R176			RK73GB1J105J	CHIP R	1.0M	J 1/16W	
R177			RK73EB2B102J	CHIP R	1.0K	J 1/8W	
R178			RK73GB1J472J	CHIP R	4.7K	J 1/16W	
R180			RK73EB2B472J	CHIP R	4.7K	J 1/8W	
R181			RK73EB2B471J	CHIP R	470	J 1/8W	
R182			RK73GB1J473J	CHIP R	47K	J 1/16W	
R183			RK73EB2B471J	CHIP R	470	J 1/8W	
R184			RK73EB2B102J	CHIP R	1.0K	J 1/8W	
R187			RK73EB2B102J	CHIP R	1.0K	J 1/8W	
R189			RK73GB1J471J	CHIP R	470	J 1/16W	
R190			RK73GB1J104J	CHIP R	100K	J 1/16W	
R191			RK73GB1J471J	CHIP R	470	J 1/16W	
R192			RK73GB1J104J	CHIP R	100K	J 1/16W	
R193,194			RK73GB1J471J	CHIP R	470	J 1/16W	
R201			RK73GB1J221J	CHIP R	220	J 1/16W	
R202			RK73GB1J103J	CHIP R	10K	J 1/16W	
R204-209			RK73GB1J102J	CHIP R	1.0K	J 1/16W	
R210			RK73GB1J222J	CHIP R	2.2K	J 1/16W	
R214			RK73GB1J104J	CHIP R	100K	J 1/16W	
R215			RK73GB1J471J	CHIP R	470	J 1/16W	
R219,220			RK73GB1J222J	CHIP R	2.2K	J 1/16W	
R223,224			RK73GB1J104J	CHIP R	100K	J 1/16W	
R225			RK73GB1J102J	CHIP R	1.0K	J 1/16W	
R226			RK73GB1J222J	CHIP R	2.2K	J 1/16W	
R227,228			RK73GB1J102J	CHIP R	1.0K	J 1/16W	
R229			RK73GB1J104J	CHIP R	100K	J 1/16W	
R230,231			RK73GB1J471J	CHIP R	470	J 1/16W	
R232			RK73GB1J104J	CHIP R	100K	J 1/16W	
R233-236			RK73GB1J222J	CHIP R	2.2K	J 1/16W	
R239			RK73GB1J104J	CHIP R	100K	J 1/16W	
R243			RK73GB1J222J	CHIP R	2.2K	J 1/16W	
R245			RK73GB1J104J	CHIP R	100K	J 1/16W	
R246			RK73GB1J473J	CHIP R	47K	J 1/16W	
R247			RK73GB1J102J	CHIP R	1.0K	J 1/16W	
R252,253			RK73GB1J102J	CHIP R	1.0K	J 1/16W	
R254			RK73GB1J222J	CHIP R	2.2K	J 1/16W	
R255			RK73GB1J225J	CHIP R	2.2M	J 1/16W	
R258,259			RK73GB1J471J	CHIP R	470	J 1/16W	
R260			RK73GB1J102J	CHIP R	1.0K	J 1/16W	
R261,262			RK73GB1J472J	CHIP R	4.7K	J 1/16W	
R263,264			RK73GB1J103J	CHIP R	10K	J 1/16W	
R265			RK73GB1J104J	CHIP R	100K	J 1/16W	
R267			RK73GB1J104J	CHIP R	100K	J 1/16W	
R270			RK73GB1J104J	CHIP R	100K	J 1/16W	
R272,273			RK73GB1J104J	CHIP R	100K	J 1/16W	

E1: KDC-5090R **E2:** KDC-5090RY

⚠ indicates safety critical components.

KDC-5090R/RY

PARTS LIST

＊New Parts
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ELECTRIC UNIT (X25-87XX-XX)

Ref. No.	Add	New	Parts No.	Description	Destination
R275			RK73GB1J104J	CHIP R 100K J 1/16W	
R281			RK73GB1J104J	CHIP R 100K J 1/16W	
R282			RK73GB1J103J	CHIP R 10K J 1/16W	
W51 -57			R92-1252-05	CHIP R 0 OHM	
W59			R92-1252-05	CHIP R 0 OHM	
D1			RM10ZLF	DIODE	
D2			MA4056(N)-M	ZENER DIODE	
D3			1GWJ43	DIODE	
D4			MA4091(N)-L	ZENER DIODE	
D5			HZS9A2L	ZENER DIODE	E2
D5			MA4082(N)-L	ZENER DIODE	
D6		*	HZS11B2	ZENER DIODE	E2
D6			MA4110-L	ZENER DIODE	
D12			HZS5B1	ZENER DIODE	E2
D12			MA4047-M	ZENER DIODE	
D13			AM01Z	DIODE	
D13			DSM1SD2	DIODE	
D13			ERA15-02	DIODE	
D14			1SS133	DIODE	
D15 ,16			AM01Z	DIODE	
D15 ,16			DSM1SD2	DIODE	
D15 ,16			ERA15-02	DIODE	
D17 ,18			MA4068(N)-M	ZENER DIODE	
D21 -28			AM01Z	DIODE	
D21 -28			DSM1SD2	DIODE	
D21 -28			ERA15-02	DIODE	
D30 -34			1SS133	DIODE	
D35 ,36			MA4068(N)-M	ZENER DIODE	
D37			IMSA-6801	SURGE ABSORBER	
D41 ,42			HZS6C1	ZENER DIODE	E2
D41 ,42			MA4062-L	ZENER DIODE	
D44			HZS6C1	ZENER DIODE	E2
D44			MA4062-L	ZENER DIODE	
D45 -47			MA4068(N)-M	ZENER DIODE	
D71			1SS133	DIODE	
IC1		*	UPD703033GC057	MI-COM IC	
IC2			TDA7407D	ANALOGUE IC	
IC3			HD74HC02FP	MOS-IC	E2
IC3			TC74HC02AF	IC	
IC4			TA8263BH	ANALOGUE IC	
IC7			TDA7479D	ANALOGUE IC	
IC8			S-80837ANNP	MOS-IC	
Q1 ,2			DTC143TUA	DIGITAL TRANSISTOR	
Q1 ,2		*	KRC410	DIGITAL TRANSISTOR	E2
Q5 ,6			DTC143TUA	DIGITAL TRANSISTOR	
Q5 ,6		*	KRC410	DIGITAL TRANSISTOR	E2
Q7			DTA124EUA	DIGITAL TRANSISTOR	
Q7		*	KRA303	DIGITAL TRANSISTOR	E2
Q11			2SC4081	TRANSISTOR	
Q11			2SD1819A	TRANSISTOR	E2
Q12			2SB1548(P)	TRANSISTOR	
Q13			2SA1576A	TRANSISTOR	
Q13			2SB1218A	TRANSISTOR	E2
Q14			2SC4081	TRANSISTOR	
Q14			2SD1819A	TRANSISTOR	E2

Ref. No.	Add	New	Parts No.	Description	Destination
Q15			2SB1548(P)	TRANSISTOR	
Q16			DTC124EUA	DIGITAL TRANSISTOR	
Q16			UN5212	DIGITAL TRANSISTOR	E2
Q17			DTA124EUA	DIGITAL TRANSISTOR	
Q17		*	KRA303	DIGITAL TRANSISTOR	E2
Q18			2SD2375	TRANSISTOR	
Q19			DTC124EUA	DIGITAL TRANSISTOR	
Q19			UN5212	DIGITAL TRANSISTOR	E2
Q20			DTA124EUA	DIGITAL TRANSISTOR	
Q20		*	KRA303	DIGITAL TRANSISTOR	E2
Q21			2SB1184	TRANSISTOR	
Q22			2SC4081	TRANSISTOR	
Q22			2SD1819A	TRANSISTOR	E2
Q26			DTC144EUA	DIGITAL TRANSISTOR	
Q26			UN5213	DIGITAL TRANSISTOR	E2
Q27			DTC114YUA	DIGITAL TRANSISTOR	
Q27			UN5214	DIGITAL TRANSISTOR	E2
Q29			DTA124EUA	DIGITAL TRANSISTOR	
Q29		*	KRA303	DIGITAL TRANSISTOR	E2
Q30			2SA1576A	TRANSISTOR	
Q30			2SB1218A	TRANSISTOR	E2
Q32			2SB1277(Q,R)	TRANSISTOR	
Q33 ,34			2SC4081	TRANSISTOR	
Q33 ,34			2SD1819A	TRANSISTOR	E2
Q42			DTC124EUA	DIGITAL TRANSISTOR	
Q42			UN5212	DIGITAL TRANSISTOR	E2
Q43			2SC4081	TRANSISTOR	
Q43			2SD1819A	TRANSISTOR	E2
Q45 ,46			DTC124EUA	DIGITAL TRANSISTOR	
Q45 ,46			UN5212	DIGITAL TRANSISTOR	E2
Q47 ,48			2SB1277(Q,R)	TRANSISTOR	
Q51			DTC144EUA	DIGITAL TRANSISTOR	
Q51			UN5213	DIGITAL TRANSISTOR	E2
Q52			2SC4081	TRANSISTOR	
Q52			2SD1819A	TRANSISTOR	E2
Q55			2SA1576A	TRANSISTOR	
Q55			2SB1218A	TRANSISTOR	E2
Q56			DTC124EUA	DIGITAL TRANSISTOR	
Q56			UN5212	DIGITAL TRANSISTOR	E2
TH1			PTH9C42BD471Q	POSITIVE RESISTOR	
A1	3D		X86-3242-70	TUNER UNIT	E2
A1	3D		X86-3342-71	TUNER UNIT	E1

CD PLAYER UNIT (X32-5010-00)

C1 ,2			CK73FB1C105K	CHIP C	1.0UF	K	
C3			CK73FB0J475K	CHIP C	4.7UF	K	
C4			C92-0566-05	CHIP-TAN	10UF	6.3WV	
C5			CC73GCH1H150J	CHIP C	15PF	J	
C6			CC73GCH1H020C	CHIP C	2.0PF	C	
C7			CK73GB1C104K	CHIP C	0.10UF	K	
C8			CK73FB1C105K	CHIP C	1.0UF	K	
C10			CK73GB1H472K	CHIP C	4700PF	K	
C11			CK73GB1H682K	CHIP C	6800PF	K	
C12			CK73GB1H332K	CHIP C	3300PF	K	
C13			CK73GB1C333K	CHIP C	0.033UF	K	

E1: KDC-5090R **E2:** KDC-5090RY

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PARTS LIST

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CD PLAYER UNIT (X32-5010-00)

Ref. No.	Add	New	Parts No.	Description	Destination
C14			CK73GB1H472K	CHIP C 4700PF K	
C15			CK73GB1C473K	CHIP C 0.047UF K	
C16			CC73GCH1H151J	CHIP C 150PF J	
C17			CK73GB1H472K	CHIP C 4700PF K	
C18			CC73GCH1H221J	CHIP C 220PF J	
C19 ,20			CK73GB1C104K	CHIP C 0.10UF K	
C21			CK73FB0J475K	CHIP C 4.7UF K	
C23			CK73GB1H102K	CHIP C 1000PF K	
C24			CK73GB1E223K	CHIP C 0.022UF K	
C25			CK73GB1H153K	CHIP C 0.015UF K	
C26			CK73GB0J105K	CHIP C 1.0UF K	
C28			CK73GB0J105K	CHIP C 1.0UF K	
C29			CK73GB1C104K	CHIP C 0.10UF K	
C33			CK73GB1C104K	CHIP C 0.10UF K	
C35			CK73GB1C104K	CHIP C 0.10UF K	
C41			CK73EB1C225K	CHIP C 2.2UF K	
C43			CK73GB1H153K	CHIP C 0.015UF K	
C45			CK73GB1H153K	CHIP C 0.015UF K	
C46			CK73GB1C473K	CHIP C 0.047UF K	
C55			CK73GB1C104K	CHIP C 0.10UF K	
C68			CK73GB1C104K	CHIP C 0.10UF K	
C71 ,72			CK73GB1H471K	CHIP C 470PF K	
C77 ,78			CC73GCH1H680J	CHIP C 68PF J	
C79 ,80			CK73GB1H222K	CHIP C 2200PF K	
C85			CK73GB1C104K	CHIP C 0.10UF K	
C89			CK73GB1H222K	CHIP C 2200PF K	
C90			CK73GB1C104K	CHIP C 0.10UF K	
CN1			E40-9536-05	FLAT CABLE CONNECTOR (16P)	
CN2			E40-9339-05	FLAT CABLE CONNECTOR (22P)	
CN2			E41-0036-05	FLAT CABLE CONNECTOR (22P)	
CN2			E41-0129-05	FLAT CABLE CONNECTOR (22P)	
X1			L78-0572-05	RESONATOR (16.93MHZ)	
CP1 -3			R90-1019-05	MULTI-COMP 100 X2	
R3			RK73GB1J272J	CHIP R 2.7K J 1/16W	
R5			RK73GB1J361J	CHIP R 360 J 1/16W	
R6			RK73GB1J272J	CHIP R 2.7K J 1/16W	
R8			RK73EB2B4R7J	CHIP R 4.7 J 1/8W	
R9			RK73EB2B100J	CHIP R 10 J 1/8W	
R10 ,11			RK73GB1J103J	CHIP R 10K J 1/16W	
R12			RK73GB1J912J	CHIP R 9.1K J 1/16W	
R15			RK73GB1J824J	CHIP R 820K J 1/16W	
R16			RK73GB1J223J	CHIP R 22K J 1/16W	
R17			RK73GB1J433J	CHIP R 43K J 1/16W	
R18			RK73GB1J392J	CHIP R 3.9K J 1/16W	
R19			RK73GB1J513J	CHIP R 51K J 1/16W	
R20			RK73GB1J104J	CHIP R 100K J 1/16W	
R21			RK73GB1J244J	CHIP R 240K J 1/16W	
R32			RK73GB1J104J	CHIP R 100K J 1/16W	
R34			RK73GB1J683J	CHIP R 68K J 1/16W	
R36			RK73GB1J151J	CHIP R 150 J 1/16W	
R37			RK73GB1J471J	CHIP R 470 J 1/16W	
R38			RK73GB1J224J	CHIP R 220K J 1/16W	
R46			RK73GB1J102J	CHIP R 1.0K J 1/16W	

Ref. No.	Add	New	Parts No.	Description	Destination
R47			RK73GB1J103J	CHIP R 10K J 1/16W	
R49			RK73GB1J472J	CHIP R 4.7K J 1/16W	
R52			RK73GB1J104J	CHIP R 100K J 1/16W	
R54			RK73GB1J104J	CHIP R 100K J 1/16W	
R71			RK73GB1J103J	CHIP R 10K J 1/16W	
R72			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R73			RK73GB1J473J	CHIP R 47K J 1/16W	
R75			RK73GB1J333J	CHIP R 33K J 1/16W	
R76			RK73GB1J622J	CHIP R 6.2K J 1/16W	
R77			RK73GB1J563J	CHIP R 56K J 1/16W	
R78			RK73GB1J243J	CHIP R 24K J 1/16W	
R81			RK73GB1J333J	CHIP R 33K J 1/16W	
R82			RK73GB1J123J	CHIP R 12K J 1/16W	
R83			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R102			RK73GB1J332J	CHIP R 3.3K J 1/16W	
R104			RK73GB1J562J	CHIP R 5.6K J 1/16W	
R107,108			RK73FB2A331J	CHIP R 330 J 1/10W	
R117,118			RK73FB2A203J	CHIP R 20K J 1/10W	
R121,122			RK73FB2A203J	CHIP R 20K J 1/10W	
R125,126			RK73FB2A203J	CHIP R 20K J 1/10W	
R202			RK73GB1J104J	CHIP R 100K J 1/16W	
R214			RK73GB1J104J	CHIP R 100K J 1/16W	
R218			RK73GB1J473J	CHIP R 47K J 1/16W	
R233			RK73GB1J622J	CHIP R 6.2K J 1/16W	
R234			RK73GB1J103J	CHIP R 10K J 1/16W	
R238			RK73FB2A201J	CHIP R 200 J 1/10W	
W17			R92-2053-05	CHIP R 0 J 1/8W	
S1 ,2			S68-0838-05	PUSH SWITCH	
S3			S68-0859-05	PUSH SWITCH	
D1 ,2			DAN202U	DIODE	
D3			DA204U	DIODE	
D4			DAN202U	DIODE	
D5			MA8051-L	ZENER DIODE	
IC1			AN22000AA	ANALOGUE IC	
IC2			MN662774KG1	MOS-IC	
IC4			BA5917AFP	ANALOGUE IC	
IC6			NJM4565MD	IC(OP AMP X2)	
Q1			MCH6101	TRANSISTOR	
Q2			DTC124EUA	DIGITAL TRANSISTOR	
Q3			DTA143XUA	DIGITAL TRANSISTOR	
Q4			2SA1362(Y)	TRANSISTOR	
Q5			DTC124EUA	DIGITAL TRANSISTOR	

MECHANISM ASSY (X92-4130-00)

1	2A		A10-4482-01	CHASSIS	
2	1B		A10-4225-33	CHASSIS CALKING ASSY	
3	2B		A11-0915-43	SUB CHASSIS CALKING ASSY	
5	2A		D10-3082-13	ARM	
8	3A		D10-3087-44	ARM ASSY	
9	3B		D10-3092-03	SLIDER	
10	3B		D10-3093-04	SLIDER ASSY	
11	2B		D10-3095-04	SLIDER ASSY	
12	2B		D10-3096-04	SLIDER ASSY	
13	1A		D10-3099-24	SLIDER ASSY	

E1: KDC-5090R **E2:** KDC-5090RY

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MECHANISM ASSY (X92-4130-00)

Ref. No.	Add	New	Parts No.	Description	Destination
14	1A		D10-3100-04	SLIDER ASSY	
6	2A		D10-4306-14	ARM ASSY	
7	2A		D10-4305-14	ARM ASSY	
16	1B		D10-4004-04	LEVER ASSY	
17	1B		D10-4006-04	LEVER	
18	1A		D10-4007-04	LEVER	
19	2B		D10-4008-14	LEVER	
20	2A		D10-4009-23	ARM	
21	3A		D10-4010-04	LEVER	
22	3A		D10-4307-04	LEVER ASSY	
24	3B		D10-4050-04	ARM	
25	2A		D10-4038-23	ARM ASSY	
26	2A		D10-4123-24	LEVER ASSY	
27	3A		D13-1442-03	RACK (GEAR)	
29	3B		D13-1231-04	GEAR	
30	3A		D13-1240-04	GEAR	
31	3B		D13-1233-04	GEAR	
32	3B		D13-1234-14	GEAR ASSY	
33	3A		D13-1441-03	GEAR	
34	3B		D13-1232-04	GEAR	
35	3B		D13-1241-04	GEAR	
36	3A		D13-1242-04	GEAR	
37	1B		D13-1243-04	GEAR	
38	1B		D13-1244-04	GEAR	
39	1B		D13-1245-14	GEAR	
40	2A		D13-1246-04	GEAR	
41	2B		D13-1247-04	GEAR	
43	2B		D13-1249-04	GEAR ASSY	
44	2B		D13-1341-04	GEAR ASSY (LEAD SCREW)	
45	1B		D14-0668-04	ROLLER	
46	2A		D14-0670-04	ROLLER	
47	3B		D14-0674-04	ROLLER	
49	3A		D21-2228-14	SHAFT	
50	1A		D21-2229-04	SHAFT	
51	1A		D23-0925-24	RETAINER	
52	2A		D32-0614-04	STOPPER	
53	1B		D39-0223-05	DAMPER (YEL)	
54	2B		D39-0224-05	DAMPER (BLK)	
55	3B		F09-1246-04	SHEET	
58	3B		F09-1266-14	SHEET	
60	2A		G01-2770-04	EXTENSION SPRING	
61	3A		G01-2771-04	EXTENSION SPRING	
62	3A		G01-2772-24	EXTENSION SPRING	
63	3A		G01-2773-14	EXTENSION SPRING	
64	3A		G01-2774-34	EXTENSION SPRING	
65	1B		G01-2775-04	TORSION COIL SPRING	
66	1B		G01-2776-14	TORSION COIL SPRING	
67	3B		G01-2777-24	TORSION COIL SPRING	
69	2A		G01-2844-04	EXTENSION SPRING	
70	2A		G02-1231-04	FLAT SPRING	
71	2B		G02-1232-24	FLAT SPRING	
72	2A		G02-1241-24	FLAT SPRING	
73	2A		G02-1248-14	FLAT SPRING	
75	2A		J11-0613-13	CLAMPER	
76	3A		J19-4678-13	HOLDER	
77	2B		J19-4679-24	HOLDER	
78	3B		J21-7684-13	MOUNTING HARDWARE	
79	2B		J21-7686-13	MOUNTING HARDWARE	
80	1B		J21-7690-03	MOUNTING HARDWARE	
82	3A		J84-0107-05	FLEXIBLE PRINTED WIRING BOARD	
83	1A		J90-0757-22	GUIDE	
A	2A		N09-4249-05	MACHINE SCREW (M1.7X2.5,LOCK)	
B	1B		N09-4172-05	TAPPING SCREW (2X3.5,CTITE)	
C	2B		N09-4202-05	STEPPED SCREW	
D	2A		N38-2020-46	PAN HEAD MACHIN SCREW	
E	3A		N09-4294-05	TAPTITE SCREW (BIND P TAPTIT)	
F	3B		N19-2023-04	FLAT WASHER	
G	2A		N19-2058-04	FLAT WASHER	
H	3A		N19-2093-04	FLAT WASHER	
J	2A		N39-2020-46	PAN HEAD MACHIN SCREW	
DM1	3B		T42-0764-04	DC MOTOR ASSY (SPINDLE)	
DM2	3B		T42-0763-04	DC MOTOR ASSY (LOADING)	
DPU1	2B		T25-0215-05	OPTICAL PICKUP HEAD	

E1: KDC-5090R **E2:** KDC-5090RY

⚠ indicates safety critical components.

MEMO

KDC-5090R/RY

SPECIFICATIONS

FM tuner section

Frequency range (Frequency step) ..... 87.5MHz~108.0MHz (50kHz)
Usable sensitivity (S/N=26dB) 0.7μV/75Ω
Quieting sensitivity (S/N=46dB) 1.6μV/75Ω
Frequency response (±3.0dB) ..... 30Hz~15kHz
S/N (MONO) 65dB
Selectivity (DIN) ..... ≧80dB (±400kHz)
Stereo separation (1kHz) 35dB

MW (AM) tuner section

Frequency range (Frequency step) ..... 531kHz~1611kHz (9kHz)
Usable sensitivity (S/N=20dB) 25μV

LW tuner section

Frequency range ..... 153kHz~281kHz
Usable sensitivity (S/N=20dB) 45μV

CD section

Laser diode ..... GaAlAs (λ=780nm)
Digital filter (D/A) ..... 8 Times Over Sampling
D/A converter ..... 1 Bit
Spindle speed ..... 500rpm~200rpm (CLV)
Wow & Flutter ..... Below measurable limit
Frequency response (±1dB) ..... 10Hz~20kHz
Total Harmonic Distortion 0.01% (1kHz)
S/N (1kHz) 93dB
Dynamic range 93dB
Channel separation 85dB

Audio section

Pre-out
- Level/Load (Unbalanced) ..... 1800mV/10kΩ(CD/CD-CH)
- Impedance ..... ≦600Ω

Amplifier
- Maximum power 47Wx4
- Power (DIN45324, +B=14.4V) 29Wx4

Tone action
- Bass ..... 100Hz±10dB
- Middle ..... 1kHz±10dB
- Treble ..... 10kHz±10dB

General

Operating voltage ..... 14.4V (11V~16V allowable)
Current consumption 10A
Installation size (W x H x D) ..... 182 x 53 x 162 (mm)
Weight 1.7kg

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

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